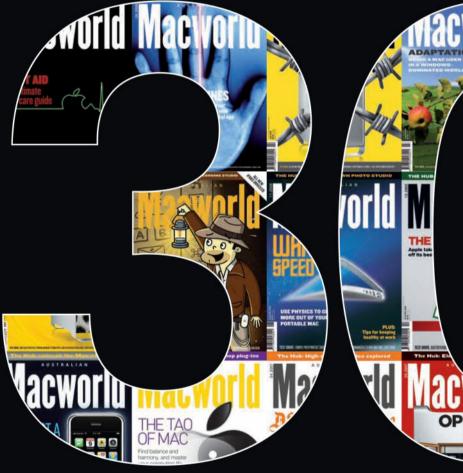
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HOW TO SPEED UP A SLOW IPHONE

Clean up and restore the speed of an older iPhone that's lost a little of its zip with these handy tips.











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Thirty years of Macworld Australia

have been with Macworld Australia for a tenth of its existence. Since my arrival in 2012, I have been able to live and breathe Apple and experience the joys of new products, the desire to learn how a new software works, the humour in rumours and see this company's next wearable line take shape.

Call it the naivety of youth, but I think this is the best time to be involved in technology and riding the Apple express. I started in March 2012, after Dave Bullard gave me a chance as an intern and subsequently a job as the assistant editor. This timing meant I missed the Steve Jobs era, as he passed away in the few months before I began, and I think that is, in a way, a blessing.

This may be seen as a horrible thing to say, and do not take it that I do not appreciate his work, I do, but Steve Jobs doesn't equal Apple to me. So much of this 'Apple is doomed' commentary is sourced from the fact that Steve Jobs personified Apple to such a large degree. Even more than Bill Gates is aligned with Microsoft. But I see it differently.

I don't see it as Tim Cook's Apple, Jony Ive's Apple, Phil Schiller's Apple or even Steve Wozniak's lost Apple. It is just Apple. A company that makes products that I love to use every day and brings enjoyment to so many people around the world. The recent quarterly financial results are a clear indication that Apple is getting a lot of love.

And that is why I look forward, not back. The last 30 years of *Macworld Australia* have covered Apple's rises and falls, successful products and the G4 Cube, the changes in direction and the returns, and it will continue to do so. *Macworld Australia* and Apple are linked and, as we will see next month, Apple will continue on its march to the wearables market without Steve.

To all the editors, writers, contributors, sales staff, publishers, designers, production staff and printers, thank you for your contribution over the past 30 years! No matter how big or small, everyone has pitched in to make this magazine work.

To all of the readers and subscribers, thank you for creating an environment where we can dive into technology as a collective and share. Your ongoing support keeps us going.



STAFF PICKS

What will be the next technology breakthrough?



JONATHAN STEWART

SELF-DRIVING CARS

While they are beginning to see the light of day, I think self-driving cars will become popular before we know it. Will Apple get involved?



MADELEINE SWAIN

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sooner it arrives, the better.



MONIQUE BLAIR

HOVERBOARD

Although Back to the Future has predicted a lot for the future of technology, I am still waiting for my hoverboard and Nike power laces.

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HAVE YOUR SAY

LETTER OF THE MONTH

PARADISE LOST, PARADISE FOUND

Having been a self-confessed computer geek for over 30 years, I enjoy new technology and everything that it offers us. I love to play with new toys and try and get the best out of them, sometimes to my own detriment!

Case in point – a few months ago I became somewhat disenchanted with Apple's new operating system offerings as, for me, neither OS X Yosemite or iOS 8 were behaving as they should and were not the stable, well-tested products that we have all become accustomed to from Apple.

This led me to lose the plot/ toss my toys out of the cot and declare in no uncertain terms that I was done with Apple for both my computer and mobile requirements and that I was returning to Windows and buying an Android phone!

Well after a few months I'm coming back with my head hung sheepishly to admit that I was wrong.

Why? The answer is one word: 'infrastructure', to put it simply (and bluntly) – no other company has the consistency of infrastructure and services that Apple has.

Google has some good products but the cohesion between Gmail on Android and



desktop email clients is seriously lacking. Why on earth if I read an email on my phone does it still show as unread in my desktop email client? OK, this may be a failing of the email client rather than the service, but surely it's not that difficult? iCloud email, while not perfect, at least handles the showing of read/unread emails very well between iDevices, desktop mail client (Apple's Mail app) and webmail.

Let's look at the quality of the applications for Android versus the iPhone/iPad/iPod – Android applications are in my experience far less stable than their iDevice equivalents. Sure, you get a little more range on Android due to Apple's requirements for software and specific software categories, but overall Apple wins here.

There is also the danger with

Android that you can install software that contains malware with relative ease through a process known as 'sideloading'. To enable this you must tell Android to allow installation from these 'unknown sources' as Google calls them by going in to the system settings.

Apple, on the other hand, tests all apps before they are listed on the App Store, providing an extremely high level of protection.

Then there is the desktop experience; OS X is quite simply head and shoulders above Windows in usability (and I'm talking an Elf versus a Hobbit!).

So to summarise, I'm back to my old self again and if I ever rant about how 'bad' Apple is at something again you have my full permission to hit me about the head with a wet fish!

Jamie

WORD FOR iOS

Both Excel and Word for iPad are nice to use and it is nice to be able to edit whenever



one needs. However, it would be good to be able to print from within the app. To print a document requires that I send the document to Google Docs, save as a Google document then send to the printer. It would be nice to not have to go through this hassle. John

WI-FI ISSUES CONTINUE

In regards to the online article, 'Wi-Fi issues continue to hamper OS X users despite updates' (bit.ly/1D8a4v3), Apple is looking more and more like Microsoft.

Profitable. Great hardware. Terrible software. It's clearly the great hardware that accounts for Apple's bullish sales in the latest fiscal quarter. One can only wonder when, or even if, its software failings will catch up with it. So far all the bad news about Yosemite and iOS 8 hasn't made a discernible dent in Apple's reputation or its bottom line.

As for Microsoft, it is well diversified so that the successful divisions continue to sustain the company in spite of its failings.

Clearly no one on Apple's board is looking beyond the bottom line to hold Tim Cook accountable for the Yosemite fiasco. Which suggests that accountability is no longer a thing at

Apple. Problems don't get fixed. Buggy updates roll out the door and no heads are seen to roll – anywhere inside Apple.

And customers? Their problems and complaints just don't seem to matter anymore. WhiteDog

ALREADY HAVE MY SMARTWATCH

As much as I like Apple, I've already got my smartwatch. It's the Garmin 920XT, which has everything I want: GPS, heart rate monitor, Wi-Fi, Bluetooth, step counter (I'm not so pleased with the function that tells me to 'Move!' if I've been still for too long though). And the battery lasts at least three to four days before it needs to be recharged (the previous Garmin 910 had a distressingly small battery capacity of less than two days requiring daily recharging).

I won't be buying the Apple watch. You only need one, if that. Wavne

WHAT'S NEXT?

I love the Macworld Australia online article, 'What's the best media for long-term storage' (bit.ly/1D7TKu7), especially the comment on stone tablets! It also reminded me of the story of music media.

Who remembers 78s followed by LPs? Both very fragile (remember all the tools for maintaining and repairing LPs). Then came the 'indestructible' CD! Yeah right! One scratch and a CD was next to useless.

Now, of course, we all have MP3 players and although the MP3 format is, to not put too fine a point on it, disappointing, it is easier to manage and protect than LPs and CDs!

But back to storage, who has a lot

of floppy disks floating around their office still? But, more importantly, who has a floppy disk drive they can read them with?

So, what is next for data and music storage? Keith

- Letters should be emailed to editor@macworld.com.au with a subject header of 'Letter to the Editor' or by post to: Macworld Australia Mailbox, 142 Dorcas Street, South Melbourne, Victoria, 3205. Please include your full name and address, including state or territory.
- Comments on stories or Forum posts on www.macworld.com.au are also eligible for the prize.
- We reserve the right to edit letters and probably will.
- Letters of fewer than 200 words are given preference.



This month's prize to the Macworld Australia reader who has submitted what we think is the most interesting letter is an 8ware 6-Port Desktop USB Charging Station, worth \$54.95, from Anyware.

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4. Employees, their immediate families and agencies associated with this competition are not permitted to enter. 5. The Promoter accepts no responsibility for late or misdirected entries. 6. The best entry/entries as determined by the judges will win the prize(s). 7. The Promoter is neither responsible nor liable for any change in the value of the prize occurring between the publish date and the date the prize(s) is claimed. 8. The prize(s) is not transferable and will not be exchanged for cash. 9. The winner(s) will be notified by email. 10. All entries become the property of the Promoter. 11. The collect property of the Promoter. 11. The collection, use and disclosure of personal information rided in connection with this competition is governed by the Privacy Notice 12. The Promoter is Niche Media Pty Ltd of 142 Dorcas Street, South Melbourne, Victoria 3205 Ph 03 9948 4900, (ABN 13 064 613 529



HOT STUFF A selection of Apple, Mac and iOS news from Macworld.com.au

APPLE SELLS RECORD NUMBER OF IPHONES IN BLOCKBUSTER **HOLIDAY QUARTER**

Record revenue from iPhone and Mac sales helped Apple bring in US\$74.6 billion in revenue last quarter, up from US\$57.6 billion a year earlier.

Income for the quarter, which ended 27 December and included the important holiday shopping period, was US\$18



billion, up from US\$13.1 billion in the same quarter last year. Earnings per share came in at US\$3.06 compared with US\$2.07 a vear earlier.

Record revenue from iPhone and Mac computer sales helped the company's results, Cook said in a news release. iPhone sales totalled 74.5 million units, the company said. Sales outside the US accounted for 65 percent of revenue.

The company's revenue and profit also beat financial analysts' expectations. Analysts polled by Thomson Reuters had called for revenue of US\$67.7 billion and earnings per share of US\$2.60. It was the first quarter of Apple's 2015 fiscal year.

APPLE WATCH AIMS TO LAST 19 HOURS PER CHARGE

If all goes according to plan, your Apple Watch should last about 19 hours on a single charge, according to the latest reports.

Reports at the end of January state that the S1 chip in the Apple Watch is similar in power to the A5 processor in an iPod touch, and the display has a refresh rate of 60 frames per second. That gives the watch impressive performance and a stunning screen, but it also means shorter battery life. Apple really wants the watch to stand up to 2.5 to 4 hours of intense use



APPLE WATCH STARTS SHIPPING IN APRIL

We knew it was coming sometime this autumn, but now we have a more narrow time frame: Apple Watch starts shipping in April, Tim Cook has said.

So it's not an exact date, but we're getting closer. Cook dropped the news on Apple's quarterly earnings call in January, saying Apple Watch is "on schedule" and will ship in April. The company reportedly hasn't publicly committed to a date because Cook and co are still working on the device's battery life.

(fitness-tracking, games or apps), or three days in standby mode when the watch face display is off. The 19-hour goal is a combination of active and passive use but mostly passive.

A full day of use on a single charge doesn't sound all that bad, and we already knew the watch would need a nightly charge, though there's a catch: According to reports, Apple may not hit that target with the first-generation watch. Concerns about reaching the 19-hour goal may have (understandably) delayed the launch. Apple is also perfecting its charger, which combines inductive and MagSafe technology, for faster recharging.

Battery life is incredibly variable and has been a huge pain point for smartwatch success. One person may use apps sparingly and reach the full 19 hours while another could kill the watch in no time at all with heavy use. Compared to battery life in competing Android Wear smartwatches like LG's G Watch R and Motorola's Moto 360, Apple Watch may land right in the middle. The G Watch R impressed reviewers with its ability to hold a charge, while the Moto 360 tanked (though we hear it's improved recently). Apple may be aiming to underpromise and overdeliver, which would be smart.

RUMOURED APPLE iPAD STYLUS COULD POINT TOWARD BUSINESS AMBITIONS, BIGGER TABLETS

Apple co-founder Steve Jobs didn't like the idea of a stylus for mobile devices, famously claiming, "If you see a stylus, [the developer] blew it." The post-Jobs Apple may have a different view on the stylus, according to one analyst.

Ming-Chi Kuo of KGI Securities says
Apple is likely to release a stylus in autumn
to complement the long-rumoured 'iPad
Pro', a purported 12.9in slate. Kuo, who
is reputed to have deep contacts within
Apple's supply chain, based his analysis
on Apple's patent filings and his own
research.

Although Kuo's report is well within the 'rumour zone', an Apple-made stylus isn't all that crazy and doesn't seem impossible for even the 9.7in iPad. We've been reviewing styluses for Apple's tablet for almost as long as there's been an iPad. Clearly, there's a desire among at least some users to put pen to glass.

Also, the iPad has always been a popular device for the workplace, where greater amounts of handwriting or drawing may occur. The iPad's popularity

as a business device is poised to grow along with its computing power. Apple's partnership with IBM to build enterprisespecific apps is also likely to increase the iPad's presence in the corporate world.

APPLE DOUBLES TIM COOK'S COMPENSATION AFTER SUCCESSFUL YEAR

Apple is clearly happy with CEO Tim Cook's performance, as his compensation keeps going up and up and up. In 2014, his pay package was valued at US\$9.22 million, more than double what the company offered him in 2013.

Cook's actual salary was US\$1.75 million last year, but he also took in US\$6.7 million in non-equity incentive pay, according to a filing with the US Securities and Exchange Commission. In 2013, Cook made US\$4.25 million.

But it was retail chief Angela Ahrendts who made the most of any Apple executive in the last fiscal year. The company recruited Ahrendts from luxury retailer Burberry in May and paid her to relocate from the UK to the US. Apple gave the exec US\$70 million in stock grants in the last fiscal year, US\$37 million of which was compensation for Burberry stock she gave up to take the Apple job. Ahrendts' annual salary is US\$1 million.

Cook has been criticised for lacking Steve Jobs' spark, but Jobs' hand-picked successor has managed to push Apple to new financial heights. The company turned a US\$39.5 billion profit in fiscal year 2014, which doesn't even include holiday 2014 sales (Apple's fiscal year ended in late September). The company

also revealed a pair of big

new iPhones that have sold

out all over the world, introduced Apple Pay, and is gearing up to launch the Apple Watch next month.

But all that success doesn't leave a CEO much time to take breaks.
Bloomberg noted that Apple paid Cook US\$56,923 for unused vacation days in 2014, much more than the US\$35,000 he received in 2013.

The same day Apple disclosed its compensation details, the company announced it would need to find a new board member: J. Crew CEO Mickey Drexler is retiring from Apple's board of directors in March.

Drexler played a key role in the buildout of Apple's wildly successful retail expansion, but now that Ahrendts is on board, perhaps he felt it was time to move on. Apple hasn't yet indicated who will fill Drexler's spot. The company did add a new retail hire as it gears up for Apple Watch: Chester Chipperfield, former vice president of digital and interactive design at Burberry. It's not clear exactly what role Chipperfield will play.



HOT STUFF A selection of Apple, Mac and iOS news from Macworld.com.au



THE FIVE THINGS YOU NEED TO KNOW **ABOUT APPLE'S BEST** QUARTER EVER

Apple made all the money last quarter it's not only the best quarter Apple's ever had, it's the best guarter any company has ever had. But record-shattering revenues weren't the most interesting part of the Q1 2015 earnings conference call, in which Tim Cook took questions from analysts about the rest of Apple's plan for success. and how to keep this momentum going.

APPLE WATCH IN APRIL

First of all, the Apple Watch has a more solid ship date - sometime in April. Cook said in his prepared statement, "Development for Apple Watch is right on schedule, and we expect to be shipping in April. Developers are hard at work on apps, notifications and information summaries that we call Glances, all designed specifically for the watch's user interface. The creativity and software innovation going on around Apple Watch is incredibly exciting, and we can't wait for our customers to experience them when Apple Watch becomes available."

Previous rumours had said March, and Apple had only said autumn, so it's nice to get a better idea of exactly when the Watch will hit stores. Later, in the questionand-answer portion of the call, an analyst pressed for a little more detail, and Cook first took the opportunity to make us all

jealous that of course he has one already:

"My expectations are very high on it. I'm using it every day, and love it, and I can't live without it. And so I see that we're making great progress on the development on it, the number of developers that are writing apps for it are impressive and we're seeing some incredible innovation coming out there."

Cook even elaborated on the shipping month, too: "And just to clarify, what we had been saying is early 2015, and we sort of look at the year and think of early as the first four months, mid as the next four months, and late's the final four months. And so to us, it's within the range. It's basically when we thought. But most importantly, we're going to be thrilled to start shipping it, because we've got a lot of customers who are wanting to get one."

PEOPLE SURE DO LIKE THE IPHONE

Apple sold a record number of iPhones in the quarter, 74.5 million units. That's off the charts high, 23.4 million more than the same quarter last year. Cook doesn't expect the iPhone train to stop rolling anytime soon, either: "I would point out that only a small fraction of the installed base has upgraded, so there's a lot more people within the installed base, but I would also point out that we had the highest number of customers new to iPhone last quarter than in any prior launch. And also that the current iPhone lineup experienced the highest Android switcher rate in any of the last three launches in any of the three

previous years. We didn't look back to the other years, I don't know about those."

Cook declined to break out figures of iPhone 6 versus 6 Plus, but he did say this: "What I can tell you is that iPhone 6 was the most popular iPhone last quarter. But obviously to sell 74.5 million, they were really all popular. And all did well. There is clearly a geographic preference difference, where some geos would skew much higher on their preference to iPhone 6 Plus than other geos. So it's something that's not consistent around the world."

Apple's growth in China also contributed to the iPhone 6's successful launch. Despite not being on sale a full guarter in China (iPhone 6 launched mid-October there, and the guarter ran from 1 October to 27 December), Apple saw 100 percent year-over-year growth. Expect China to become a bigger chunk of Apple's revenue over time, as Apple expands its footprint in the country. "We'll hit 20 [Apple Stores] soon and we're doubling that by mid 2016," Cook said. "In fact our online revenues in China last quarter were more than the sum of the previous five years."

HOW IS THAT IBM PARTNERSHIP?

"We don't do a lot of big partnerships, as vou probably know. And so when we do one, it is significant, and we really believe in this one and what it can do for customers," Cook explained when asked about Apple's partnership with IBM to create custom applications for enterprise customers.

To really change the way people work, Cook said, they need apps tailored to their exact job, not just general productivity tools like spreadsheets and word processors, which the iPad has in spades. So the partnership with IBM is aimed at helping tailor apps to enterprise customers.

Cook said, "In December, we delivered the first 10 mobile first for iOS apps for banking, retail, insurance, financial services, telecommunications, governments and airlines, making iPhone and iPad even more productive for enterprises by providing app and cloud services with IBM's big data and analytics capabilities. Another 12 apps will be released this quarter, including three new industries: health care, energy and utilities, and industrial products. This will bring us to a total of 22 apps and we're on track to have over 100 by the end of 2015."

IPAD SALES SLID AGAIN

This enterprise push couldn't come at a better time, as iPad sales were soft this guarter at 21.4 million, which is 4.6 million fewer than sold during the same holiday guarter of last year. But Apple remains bullish on the iPad's long-term prospects, with Cook echoing pretty much the same things he said when iPad sales slid last quarter too.

First, iPad is attracting new customers: "I see that the first-time buyer rates are very high. By very high, I mean that if you look at some of the developed markets, like the US, Japan, the UK, you would find that 50 percent of the people are buying an iPad for the first time. If you look in China it's over 70 percent. And so when you have that kind of first-time buyer rates, you don't have a saturated market."

And people really like their iPads. Customer satisfaction surveys are high one was mentioned as hitting 98 percent.

People who like their tablets use them a lot too: "When I look at the usage, the usage is six times our nearest competitor. Usage measured in web browsing is like 71 percent of total tablets. Also the commerce taking place across the iPad is enormous. Essentially over 80 percent of the commerce on tablets is taking place on iPad."

So over time, Cook thinks people will keep buying iPads, but probably not as often as they tend to upgrade their iPhones. With iPhones getting bigger and MacBook Airs dropping in price last year, the iPad is also getting squeezed from both sides by Apple's own products: "There's probably some level of cannibalisation that's going on, with the Mac on one side and the phone on the other."

STRONG MAC SALES ONCE AGAIN

The Mac had a great holiday quarter. selling 5.5 million, up 14 percent from the previous year's holiday

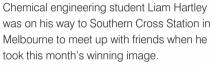
> guarter, when Apple moved 4.8 million Macs. Globally, personal computer sales continue to creep down slowly, but the Mac's market share has grown in 34 of the last 35 quarters. 🕮





Inbound over Melbourne

This month we looked skyward and found Liam Hartley's photo to be top-notch.



Capturing an aeroplane flying above with his iPhone 6, Hartley decided to apply a little editing and produced a beautiful monochromatic image that we can all enjoy.

"While the majority of my photography has minimal editing (usually just tonality/colours), this one required a little more drama," says Hartley.

"The plane silhouette was added on the iPhone from a previous photograph using the Image Blender application. The photo was then imported to VSCO Cam to allow for a more photographic film look to be applied. Hopefully, it was subtle but effective."



As with many of the previous iSnap winners, Hartley didn't set out to take the photo; instead he seized an opportunity that the portable iPhone offers.

"It is a phone that is always in your pocket and thus makes it the best camera you will always have on you. Sure a 5D MKIII would be nice, but who wants to lug that and an L lens around all the time?" Hartley asks.

There are a few situations, however, where the iPhone just doesn't cut it.

"While the small sensor allows for razor sharp images with a large depth of field, it also means that lowlight performance is pretty horrible."

In terms of apps, Hartley has a few favourites.

"VSCO Cam is a must for any iPhone photographer. I prefer the F1 or 05 presets, as they do not change the image colours particularly much. Snapseed is also a lovely application to quickly fix minor exposure errors and Camera+ is also fun if you enjoy having 'full' manual control over your photography."

Hartley recommends other iSnappers to test out the iPhone in different lighting conditions.

"Personal experience indicates that the iPhone sensor works best in only certain lighting conditions, such as the golden hour (dawn/dusk). If you are shooting in the middle of the day, then try and get into some shade, or at least somewhere that will throw a little contrast over your subject, as the dynamic range of the iPhone is pretty average."

In iSnap we're on the lookout for some of the best photographs being taken with iOS devices. Submit your favourites to macworld@macworld.com.au for your chance to be featured in the online iSnap gallery (www.macworld.com.au/isnap). Each month's winner will win a prize and appear on this page!

This month's prize is a Mount XL and a tabFlex from iStabilizer.

Secure your iPad, iPad mini or other tablet to virtually any surface with the iStabilizer tabFlex. Secure your tablet to a car headrest, tree branch, pole, fence, tripod, desk, kitchen countertop or anything else you can think of. It's a small accessory that can make a huge impact on how you use your tablet.

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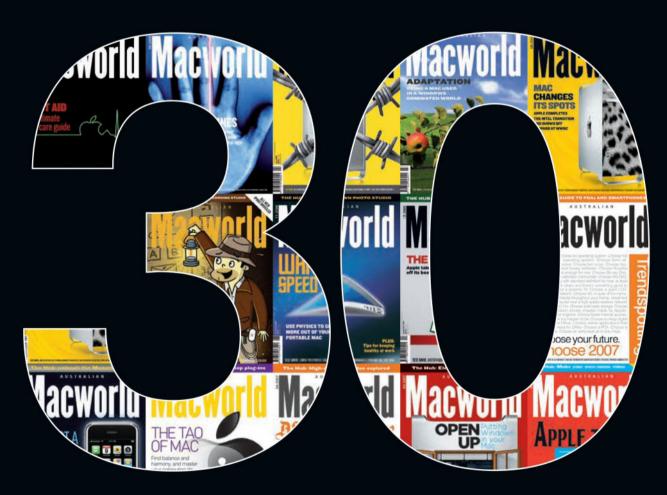
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years of celebration

To celebrate *Macworld Australia*'s 30th anniversary, we are taking a look back at the thoughts of previous editors on the future, Apple's past and how the magazine came to be.

THE TIMELINE

Australian Macworld was launched with a February-March edition in 1985 and stayed bimonthly until February 1987, save for a bonus issue featuring a software guide in September 1985. That bonus issue reflected the success Australian Macworld had achieved in its first few months in providing a focal point for the local community of early enthusiasts in a year that saw Australian Mac sales triple, while US sales failed to build on what had been achieved there in 1984. Computerworld Pty Ltd (later IDG) had launched Australian Micro Computerworld two years earlier, but in April 1984 had moved closer to the directions of its US parent by launching Australian PC World.

Neville Angove had been hired as technical editor for both *Micro* and *PC World*, then promoted to editor of *Micro* not long before it folded in late 1984. Angove stayed on to become the first editor of *Australian Macworld*. Chess Wade had joined *Micro* as associate editor when Angove was promoted and continued in that role with *Macworld*, eventually taking over as editor for much of 1986. With the rest of the team based in Sydney, Tony

Smith in Melbourne had been associate editor of *Micro* from its launch until partway through 1984, by which time he had become heavily focused on the then brand new Macintosh.

Smith was brought back to play a similar role with *Macworld* through its first year and a bit, during which the first Australian Macworld Expo – held at Centrepoint, Sydney, from 6 to 9
November 1985 – became a major focus. From the September 1985 special issue a couple of well-known identities from the fledgling Mac industry, David Fox in Sydney and Joe Selvaggi in Melbourne, took over northern and southern region advertising sales, as well as responsibility for selling floor space for Macworld Expo.

They continued in their ad sales roles until mid-1986, after which they left to give more time to their growing distribution businesses, Fox's InfoMagic and Selvaggi's Pica. Those departures provided the opportunity for Robert Wells to be recruited as publisher of *Australian Macworld (AMW)*. Following Chess Wade's departure, Wells became editor and publisher for the December 1986/January 1987 edition before hiring Osmund Lind Iversen to take over as editor for 1987. The

Wells and Iversen team finally brought some long-term stability to the masthead.

Iversen remained as editor until the April 1996 issue, when Matthew J C Powell took the reins and Iversen went on to launch the Australian edition of Publish, a pioneer in computer-to-plate publishing. Powell's editorship ended in August 1997 when IDG, publisher of Macworld, and Ziff-Davis, US publisher of MacUser, merged their Mac interests in a joint venture called Mac Publishing. With that merger, the two magazines became one under the Macworld masthead. In Australia, publication of Australian Macworld passed from IDG to Niche Media, which had previously published Australian MacUser. Editor Steve Noble ran the title until 2001, when Powell joined Niche to once again take on the editorship.

Powell remained editor until the January 2009 edition, working under associate publisher Nick Harris. Online editor David Braue produced the February issue, and Chris Oaten then came in as editor until the July 2009 edition, when family commitments forced a return to Adelaide. Then Dave Bullard took over. Nick Harris moved on from *AMW* in October 2009, concentrating on *Helinews* magazine and handing over the reins to business development manager Liana Pappas.

Liana ended her publisher stint on *Macworld Australia* in February 2013 moving to a company-wide role, with Dave Bullard filling the void. Grace Robinson and Bullard led the team for a few months until Jonathan Stewart took over the editorship in May 2013. Grace Robinson sadly left due to illness and Bullard continued in the publishing role until he became Niche's content director in July, overseeing the company's range of magazines. Madeleine Swain joined the team for 12 months before becoming the editor of a number of client publications and the *Welcome To* travel guides.

Joanne Davies, who has worked on and off with *Macworld Australia* since its IDG inception, assumed the publisher role in August 2014.



Early days. David Bunnell (left) and then-editor Neville Angove (right) at the first Sydney Macworld Expo.





THOUGHTS OF THE TIME

One of the best things about anniversary issues is looking back on what people were saying at previous milestones. So here are some thoughts by previous editors:

TWENTY YEARS AGO (OSMUND IVERSEN)

"MAC AND NEWTON INTELLIGENCE IS BRINGING UNBUNDLED TRANSPARENCY INTO OTHER DEVICES: TV SETS, VEHICLES, PHONES. PROVIDED THAT - AND IT'S A STRONG PROVISO – THE MANUFACTURERS AGREE ON A COMMON ACT TOGETHER AS A VERY LARGE MACINTOSH."

FIFTEEN YEARS AGO (STEVEN NOBLE)

NOBLE DIDN'T MAKE ANY LYRICAL ABOUT AMW MOVING TO COMPUTER-TO-PLATE (CTP) PRINTING TECHNOLOGY, "TODAY, ONCE MORE, NO, I'M NOT PREMATURELY PREDICTING THE OF THE INTERNET. I'M TALKING OF A SUITE OF RELATED **ENABLING PRINT TO COMPETE** IN THE 21ST CENTURY."

TEN YEARS AGO (MATTHEW J C POWELL)

"THE BOX ON THE DESK IS GRADUALLY MOVING OUT OF THE 'COMPUTER ROOM' AND INTO THE LIVING ROOM, THE MAC OF THE FUTURE WILL BE AS SEAMLESS A PART OF YOUR HOME AS THE TV SET AND STEREO YOU HAVE NOW (BUT WON'T NEED THEN)."

FIVE YEARS AGO (DAVE BULLARD)

"SOON WE'LL HAVE THE IPAD. LIKE THE IPHONE, IT SIMPLIFIES TASKS EVEN FURTHER AND IS THE MOST IMPORTANT HARBINGER OF A FUTURE IN WHICH COMPUTING THE MAN ON THE STREET.

SECONDLY, CLOUD COMPUTING - IN WHICH WE WORK OVER THE INTERNET, WITH OUR DATA STORED ON THE OTHER SIDE THE MAINSTREAM, A CAVEAT, ON IMPROVED SECURITY AND REDUNDANCY, AND A LOT OF PUBLIC EDUCATION.

AND THIRDLY, THE KEYBOARD WILL BECOME LESS RELEVANT AS **VOICE RECOGNITION BECOMES** BECOME MORE WIDESPREAD."

WHAT'S HAPPENING TODAY?

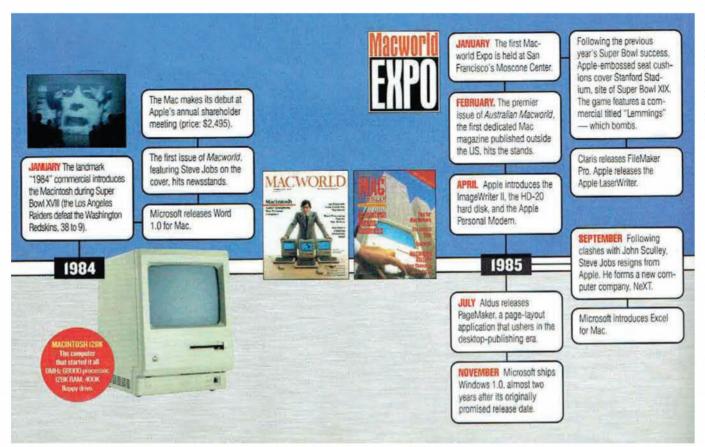
"Ten years ago, something happened. Something small. Something most people didn't notice. But it did touch a few of us. Then a few more. And a few more. And soon that something was spreading in all directions at once. One ripple following another, at a faster and faster pace, each new wave gaining more distance than the last. And the waves keep coming." From the back cover of So Far - The First Ten Years of a Vision by Rob Price. Ten years ago, then editor, Matthew J C Powell ran this quote from 1986. It was the 20th anniversary of Macworld Australia, or Australian Macworld as it was known at the time, and it summed up the beginning of Apple beautifully. I think the quote is even more relevant today.

Apple has shed its minnow tag and is now the all-encompassing juggernaut that many would have not predicted. Its ripples have spread in an incredible number of directions, at an ever-increasing pace and continue to reach new users, new demographics and new levels of usability.

In January, Apple broke all the company's records with US\$74.6 billion in revenue from one quarter. One quarter! It sold 74.5 million iPhones, 23.4 million more iPhones than the same quarter last year.

Apple is moving into the enterprise with its IBM partnership and its iPads; its Macs are now suitable for a variety of users, from accountants to graphic designers to school goers. Its Apple TVs are connecting our lives at home and its Apple Pay solution is moving into the banking sphere. Not to mention the upcoming Apple Watch, the possibilities of HealthKit in health and fitness and the move into home automation with HomeKit.

The Apple brand is as recognisable as Coca-Cola in the Western world and is increasingly being spread throughout the developing world. The move into China has seen significant growth in a onceforeign realm and the income has flowed into the Cupertino coffers. Research and development is being boosted, ecosystems are locking people in and competition for our dollar is at an all-time high.



The future of technology is exciting and connected, but increasingly draining for those outside the tech space or the youth of today. Keeping up with iOS updates can lose people and a tech divide is forming between those who follow magazines like this and those who use a new piece of technology because it has been recommended by a friend, family member or store clerk. The options are greater, but the knowledge seems to be harder to retain by those of previous generations.

As I said, this is an exciting time to work in the technology space, but the speed at which we are moving is leaving some behind.

WHAT'S NEXT?

At every *Macworld Australia* milestone, the editor sitting in my chair, would be gazing into the future and spinning their crystal ball as fast as they could. Predicting the future is a tough job, as I am finding out.

When you think that the quote from Price was written as Apple Computer sold 8-bit Apple II machines and consider the products and software Apple distributes today, there is a stark difference. And as technology grows exponentially, the next five years will feature products that have not even been imagined yet, let alone realised.

The next known stop on the Apple bus is at Apple Watch Avenue. And it was predicted by former editor Osmund Iversen 20 years ago, as Powell recalled in 2005:

"Back in AMW's 10th anniversary issue, Osmund Iversen editorialised about the demise of computing. He said, in a nutshell, that the view of the computer as 'a calculator in a metal case' had to change. He foretold a future of 'embedded' devices, in which computing power was distributed amongst handheld devices, wristbands, even jewellery and clothing. Computing intelligence, he predicted, would be everywhere. It hasn't quite happened, but Osmund was certainly on to something."

Now, I cannot guarantee that I will predict the biggest Apple product in 2035 – and I won't even try – but I do have a few predictions. Technology has altered the way we consume media and interact with our fellow man, print is on the way out

and screens increasingly dictate our days. In 10 years, HomeKit will be the base of all our Apple interactions. Our phones and our computers will run in sync via our personal cloud-run base station at home providing all of us with 24-hour access to our data and, thanks to HomeKit, our fully-automated homes. Internet limits will allow us to keep all of our data in the cloud, removing the need to store data on our devices. TV will mainly exist in an in-demand form and voice-recognition software will be the main basis of our technological interactions.

I think a nice way to finish is to run one last current quote from Powell, who sums up my thoughts precisely:

"Of course, in 10 years' time, whoever's running [Macworld Australia] will probably look back on this and say we got it wrong. I'm intrigued to wonder what the magazine will look like then – if indeed print exists at all in [2025]. In the meantime, we've got a lot to cover just keeping up with what's going to happen to digital media in the next few months. So enough of this fun

- back to work." 🔣



n the past we have discussed the chain of trust and the weak links in various methods of security.

But reader Duane has a question, regarding the safety of VPNs, he asks: "How do you know the VPN operator isn't stealing your info?"

This is an absurdly important question, and one that extends far beyond VPNs and specific issues with Apple hardware and software. Trust is a difficult commodity to measure, made more difficult by the subversion of parties that are in the chain of trust we use every day by government agencies. These security groups have been shown to weaken standards, find exploits and use them



Locked out.
If you enable
FileVault,
Apple
can't be
compelled
to provide
your recovery
key to law
enforcement.

rather than disclose to improve for all, and possibly suborn employees or place undercover agents in firms. In some countries, these sorts of weaknesses can mean your door is bashed in by the authorities and you're taken away.

Beyond government agents, we have reason to be concerned about employees of companies, companies themselves and criminals or harassers who interpose themselves in networks. These are harder to root out, and usually exposed only when information is leaked, a lawenforcement operation finds culprits, or your credit card statement arrives.

There's no way to prove incorruptibility, but there are methods companies can use to put themselves beyond needing to be trusted. That is, a company can create a secure product that is impenetrable to its own ability to access your data, whether stored or in transit.

CAN YOUR DATA BE SUBPOENAED?

Let's start with the top, Apple, which says it has such a regime in place

for iMessage, two-step verification with Apple ID, FileVault 2 in Mac OS X and other systems. Tim Cook told Charlie Rose, "If the government laid a subpoena to get iMessages, we can't provide it. It's encrypted and we don't have a key."

FileVault 2 uses an encryption system that lets you store a recovery key in escrow with Apple, but you don't have to. Without that escrow, lose your password and recovery key, and your hard drive's contents are forever gone. And we've already talked in this column about how two-factor verification as implemented by Apple prevents even Apple from regaining access to your account if you lose two of the three components.

We have no reason to believe Cook would lie: as the head of a publicly traded company, such a lie would have financial consequences, and potentially legal ones, if it came out. Nor has it been shown that Apple is misrepresenting its other security. The company says it cannot get into your encrypted sessions or data.

HAS THE CODE BEEN CHECKED?

However, iMessage and these other options aren't open to outside review or 'code auditing', which would allow unaffiliated parties to examine the software both to confirm that there are no intentional back doors and to find and help repair any flaws that were missed. Many opensource projects not only provide the programming code freely, but also eagerly accept patches.

The lack of outside review cost Apple a point in a guide put out last year by the Electronic Frontier Foundation (EFF), its 'Secure Messaging Scorecard'. The EFF set seven measures by which it could evaluate the security (encryption choices) and integrity (the ability to avoid interception or exploitation).

iMessage and FaceTime both received five out of seven, one for not allowing outside code review and another for providing no method to validate the identity of someone with whom you're in contact. By contrast, Skype (owned by Microsoft) scored one out of seven and Facebook's WhatsApp got just two. By these measures, Apple is certainly providing better overall mechanisms to secure messaging, but it could do better.

WhatsApp is transitioning its internal messaging system to use TextSecure, an open-source messaging module that scored seven out of seven in the EFF's report. Android users already have access, and it will be rolled out to other platforms in the future, setting the bar higher for mass-market encryption.

Apple's assurances, taken at face value, are quite good, but because it controls all the pieces of its systems and allows no public outside inspection, on an ongoing basis there's no way to know quite how secure it is. After a claim in mid–2013 by security researchers that Apple could potentially intercept messages, the current chief technologist at the FTC, Askhan Soltani, wrote in *The*





For your eyes only. iMessage is encrypted, and while Apple doesn't provide the code for review, the EFF scored iMessage's security higher than Skype and WhatsApp.

Washington Post, "So, is iMessage interception possible? Yes, of course. When you control the entire stack, anything is possible." (The stack here refers to the set of interconnected messaging and networking protocols and software that implements them.)

Apple is at the top of our list: it's a giant company with much to lose and so far has seemingly met the test of what it claims. Can we trust Apple with our messages and other data? Probably as much as any company, though it could do more to provide independent assurance of such. That's as much reassurance as I can offer.

DECIDING WHOM TO TRUST

To return to Duane's question: how do we trust other companies? A VPN firm of the scale of Cloak, which has three employees, has to rely on reputation and action, but also on implementation. Cloak developed its own wrapper around existing software that it keeps up-to-date. The underlying software is well vetted and has SSL/TLS at its core, and uses Apple's own mechanisms

to install security certificates that validate connections.

To trust Cloak or a similar company, we have to believe that it lacks the motivation to engage in theft and possesses the competence to configure its systems well and keep them up-to-date. The test of both of these is often time: we need to know how they perform longitudinally and when faced with threats. One code-hosting and project management firm shut down last June when its full redundancy and real-time backups were shown to be hollow, as all its infrastructure was protected by the same web services credentials.

Duane, I'd like to say the real answer is that most businesses engage in ethical behaviour, whether it's because the owners want to do the right thing or because the cost of ethical or legal violations is so high it deters them. Can we ever know for sure that a given company deserves our trust? No. But we can calculate the odds by looking at the technical and legal factors that underlie why we grant trust to any business.





iOSAPPS: MOVING BEYOND THE DEFAULT

Whether it's time to work, rest or play, there's an app for every occasion. BY ADAM TURNER.

he latest sleek and sexy iGadgets are a joy to behold, but it's the amazing App Store that helps the Apple ecosystem stand out from the crowd. No matter what your passion, there's always an app to help you along the way.

NEWS, SPORT AND WEATHER With an iGadget in hand, it's easier to keep up-to-date with what's happening in the world.

Google News is a great starting point if you like to keep track of current affairs. The HTML5-based website looks very slick in Safari and you'll find it at news.google.com.au, but there's also a dedicated Google News & Weather app. Sign in with your Google account and it's easy to customise your news feed.

If you're specifically after Australian news, then it's hard to go past the main Australian Broadcasting Corporation news app. It offers easy access to written stories, as well as radio and TV excerpts and a link



Good morning. The Australian Broadcasting Corporation news app allows users to wake up with news, live radio or TV streams.

to the live ABC News 24 stream. You can even set an alarm to wake you each morning with news bulletins or live broadcasts.

Alternatively, you'll find new apps for the major Fairfax and News Ltd newspapers, such as *The Age, The Sydney Morning Herald, The Courier Mail* and *The Australian*. You'll get some stories for free, but a subscription is required for unlimited access. If you're interested in magazines, check out Zinio as well as Apple's Newsstand.

If you'd rather collate your own news feeds, then an RSS reader, such as Feedly, Feeddler or Reeder 2, may be the answer. Also check out the magazine-style Flipboard, which lets you flick and scroll through your news feeds as if it were a custom magazine printed especially for you.

Australian sports fans are spoiled for choice when it comes to iOS apps, letting you keep tabs on the action no matter where you are. You'll find official AFL (Australian Football League), NRL (National Rugby League), Rugby Union, A-League and Cricket Australia apps, along with slick third-party apps from the likes of Sportsmate Mobile that let you keep an eye on your favourite teams. If your sporting



Lay it out. Flipboard provides a magazine-style layout of your chosen news.

tastes extend abroad, you'll find great apps for the Tour de France, Formula One, English Premier League and, in the US, the NBA (National Basketball Association) and NHL (National Hockey League) among many others.

When you need to check the weather forecast, you'll get the best results from apps that rely on data from Australia's Bureau of Meteorology. ShiftyJelly's Pocket Weather Australia is the pick of the bunch, offering easy access to extended forecasts around the country, along with live rain radar so you don't get caught without an umbrella.

SOCIAL MEDIA

Of course, mainstream media isn't the only way to stay in touch with the world and you'll find a raft of great social media apps.

Your first port of call should be the official apps for social media and sharing services like Facebook, Twitter, Google+, Foursquare, Instagram, Pinterest and Vine. Some support two-factor authentication and send you a code via SMS the first time you login from a new device – it's a sensible extra layer of security to keep unwanted guests out of your social media accounts.

If managing all these services becomes a chore, you can simplify things with social media aggregator apps like Hootsuite, Buffer and Sprout Social. They provide a global overview and make it easy to post to multiple services simultaneously. You can also check out great third-party Twitter apps, such as Echofon, Twitterrific and Tweetbot. Try Flipboard if you want to read through your social media feeds magazine-style.

For most people, social media is about sharing. If you're looking to share photos with friends, and control who can see them, then the Facebook app offers a simple starting point. If you're a serious photographer after more advanced features, you may look to photo-centric sharing apps such as Flickr, Photobucket, 500px and SmugMug.

Photo collages are a great way to bring your social media feeds to life, letting you mix and match images from your camera roll to tell a story. FrameUrLife and Insta picframes are useful apps to add to your iGadget – the former gives you a wide choice of aspect ratios and layouts, while the latter includes advanced editing features.

Happy snapping. Instagram is a photo editing and sharing app with a huge community following.

Sharing video is just as easy using apps like Facebook and YouTube, but if you're looking for alternatives then try Vimeo and some of the photo sharing services.

Instant messaging apps offer another useful way to keep in touch with the world. FaceTime is built into Apple devices, but it's not much use for contacting people who live outside the Apple ecosystem. Skype is a must-have for voice, video and text messaging, but you may also look to WhatsApp and Viber depending on which apps your friends favour. Meanwhile Skype's Qik lets you leave short video voicemails for your friends.

HEALTH AND FITNESS

As your constant companion, your iPhone makes a natural personal trainer when you're trying to get in shape.

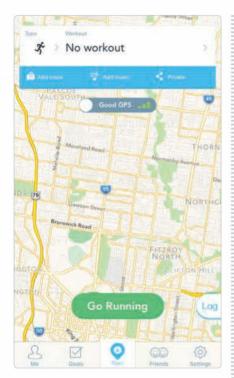
If you own a fitness tracker from the likes of Fitbit or Jawbone, then you've surely downloaded the mobile app, but there are plenty of other great fitness apps to add to your arsenal.

RunKeeper is a great starting point if you're looking to keep tabs on your

exercise efforts. Every time you go for a run, walk or jog, the app can track your efforts on a map and update you on your progress with audio prompts. It's also designed to track stationary workouts such as gym sessions. RunKeeper lets you set goals, such as losing weight or training for specific events like a 5km fun run. You can share your results online and even search for friends to exercise with.

To better track your efforts, RunKeeper can talk to a range of fitness gear, such as heart rate monitors, sleep monitors and Wi-Fi-enabled scales. It also connects to the Apple Health app.

If you're really serious about losing weight, then the Weight Watchers Mobile AU and Australian Calorie Counter apps are particularly useful – their food databases are customised for Australia. Unlike foreign apps, you'll find most items in



Keeping track. RunKeeper has a number of features to track your exercise and workouts.

Australian supermarkets along with a wide range of store-bought food.

Mental health is just as important as physical health and that's where Smiling Mind can help. It offers a range of simple meditation tips designed to assist with stress, anxiety, depression and other mental health issues. Smiling Mind is very down to earth, unlike some relaxation apps that some people may find a little too New Age-y.

If you still struggle to sleep after an active day, then Relax Melodies may be the answer. The app lulls you to sleep with soothing nature sounds, which sounds corny, but can be surprisingly effective. There's a wide range of water sounds, including river, ocean, waves, rain, wind, waterfall and storm. Beyond this you'll find birds, white noise, campfire and forest noises. You can mix and match the sounds, with individual volume control, until you find the perfect mix to help you get to sleep.

If you wake still feeling tired, then the Sleep Cycle app may be for you. Your brain goes through cycles at night, falling into deep sleep and then stirring after an hour or so before dropping off again. With your phone beneath the undersheet, next to your pillow, Sleep Cycle tracks your movements and aims to wake you in the morning during light sleep, so you feel refreshed.

TRAVEL AND TRANSPORT

When it's time to explore the world, your iGadget can serve as your tour guide, navigator, translator and much more.

When you're heading into town, you'll find plenty of useful public transport apps, such as Melbourne's PTV, TripView Sydney or the Go apps for Canberra, Brisbane, Adelaide, Perth and several other Australian cities. Melbourne's tramTRACKER is particularly useful, because it relies on its network of users to monitor trams and update the timetable, so you know exactly when the next tram will arrive.

When it's time to hop behind the wheel, you may rely on Apple Maps or Google Maps, but if you're looking for more features consider TomTom Australia. Along with the advantage of offline maps, TomTom adds advanced lane guidance, advanced route planning with multiple stops and alerts for road safety cameras. You can also subscribe to live traffic updates and purchase silly voices from *Star Wars* and *The Simpsons*.

When you're travelling abroad, then offline maps become even more important, as you can't always rely on mobile internet. PocketEarth offers street-level maps for cities, regions, provinces and even entire countries, along with a built-in travel guide.

128 km ✓ Menu Categories Areas Districts, Suburbs, Nearby Villages Streets Locate Streets **Public Transport** Airport, Bus, Metro, Train Gas, Car Rental, Parking Food & Drink Restaurants, Cafes, Bars, Pubs Entertainment Cinema, Theatre, Attractions, Nigh... Shopping Clothing, Bookstores, Supermarkets Sightseeing Museums, Monuments, Viewpoints Religious Services, Sites, Places of worship

In your pocket. PocketEarth provides both maps and points of interest for those on the road.

PocketEarth uses icons to mark Points of Interest, letting you tap for more information, so the maps don't become too cluttered. You can also add and remove map layers to make the maps easier to read. There's also basic routing, offering a list of directions and a line on the map, but not real-time turn-by-turn instructions. You need internet access to plan routes, but you can save them for offline use.

If you're heading overseas, then you also may need a translation app to help you come to grips with a foreign tongue. Google Translate lets you dictate or type an English phrase and quickly produce a written and spoken translation. It will also translate foreign phrases back into English. It's not a miracle worker, but it could help you out in a tight spot. Thankfully, you can display the foreign text full-screen in order to show the other person, which helps if you're struggling with your pronunciation. There's also a Word Lens mode that lets you snap photos of signs and translate the text.

PRODUCTIVITY

The iWork suite is a great starting point, especially now that Apple has tightened integration with Mac desktop apps, but there are plenty of alternatives if you need a cross-platform solution that lets you jump between devices.

Google Drive and Microsoft OneDrive are the two main contenders – both combine online storage with document creation and editing tools. Microsoft's new version of Office for iPhones brings it into line with the slick iPad version – letting you edit Office files on these gadgets even if you don't have an Office 365 subscription. There's also tighter integration with Dropbox.

If you're looking for a versatile document reader, then it's hard to go past GoodReader. It can read a wide range of documents, sync with various cloud storage services and transfer files directly via Wi-Fi or USB. If you need to keep digital copies of hefty manuals close at hand, such as the PDF manual for your digital camera, then GoodReader may earn a place on your iGadget.

When it comes to keeping notes, Evernote is still one of your best options. It's easy to mix and match web clippings, handwritten notes, photos and audio clips in the one note. You can create multiple notebooks to track different projects and



Note it. Evernote is one of the best apps for taking notes, making lists and organising your work life.

also tag notes with keywords and location data to make it easy to search through your note library.

Evernote is also handy for making todo lists, but other useful options include Any.do, Wunderlist and Remember the Milk. If you're putting together a reading to-do list of articles you want to read in your spare time, try Pocket, Readability and Instapaper.

These days you can do just about anything from an iGadget, but there's still the odd occasion when you need to remotely access your desktop Mac or PC. This is when LogMeIn can be a lifesaver – a great remote desktop app that lets you control your computer over the internet as if you were sitting in front of it.

EDUCATION

Many of these productivity apps will obviously be useful for students, but you'll also find a range of great education apps to make life easier in and out of the classroom.

When it comes to jotting down your ideas, Popplet is a kid-friendly brainstorming app that makes it easy to draw mind maps and link ideas in bubbles. You can use text, images or handwriting in each bubble, change their shape and colour and shift them around the page. Once you're finished, you can export your mind map as a JPG or PDF, or else upload it and share it with others.

You Doodle is a surprisingly powerful art studio editor that lets you edit images, create collages and overlay text and clipart. You can also add layers and use masks to create special effects. You Doodle is perfect for creating impressive images to use in school projects and presentations.

Explain Everything goes further by letting you capture your note-taking process to create 'screencasts' to use as projects or tutorials. The app lets you import content from a wide range of sources, animate it and add your own annotations, audio and



Draw and edit. You Doodle lets you edit images, create collages and overlay text and clipart.

video. You can export the results in various formats, share them online or use the app as a real-time interactive whiteboard for sharing ideas with the class.

There are plenty of calculators in the App Store, but MyScript Calculator stands out from the crowd because it lets you write complex equations with your finger. The app converts your scribble into text and then solves the equation for you on the spot. It automatically balances equations and supports a wide range of operators and constants.

If you're after a scientific calculator that handles graphing and other advanced features, then take a look at QuickGraph and Calculator+. Physics students should download Phy, which offers a wide range of useful formulas, while chemistry students should check out Molecules, which lets you manipulate three-dimensional renderings of molecules to better understand their structure.

PHOTOGRAPHY

There's a treasure trove of great photography tools in the App Store, turning your iPhone or iPad into the ultimate photographer's assistant.

iOS 8's built-in camera is surprisingly versatile, but if you're looking for more advanced features it's worth checking out third-party camera apps such as



Editing options. Filterstorm allows for layers, masks, colour levels, high-res image export and more.



Listen up. Tuneln Radio brings local and global radio in one sleek package.

ProCamera 7 and 645 Pro Mk II. Serious photographers will appreciate ISO control to adjust for different lighting conditions, along with histograms to see the tonal range in your shots. If you're looking to capture long exposure shots, check out Average Camera Pro or Slow Shutter Cam.

If your photos need an once-over to look their best, look to Faded and VSCO Cam for extra sharpening, grain and vignette tools to add polish to your shots. Filterstorm adds support for layers, masks, curves manipulation and colour correction. Color Splash makes it easy to create a black and white photo while leaving some areas in colour, while LensLight lets you play with the light to add lens flare, light leaks and spotlights as well as bokeh background blur.

If your images need serious work, you should look to apps like Adobe Photoshop Touch, which brings a surprising number of Photoshop's desktop features to the iOS, including Clone Stamp, Healing Brush, Magic Wand and support for layers.

When it's time to turn to your serious DSLR, the Triggertrap app can function as a remote trigger, either using Wi-Fi or the range of Triggertrap dongles designed to suit most cameras. When the app is controlling an external camera, you can

use your iPhone as a sound, vibration or motion detector, as well as access a range of cable release, time-lapse and High-Dynamic Range modes.

Your iPhone can also stand in for many of the other gadgets in your photography bag. Apps like Pocket Light Meter turn your iPhone into a makeshift light meter, while Triggertrap and Long Time Exposure Calculator offer neutral density filter calculators for determining long exposure times. DOFMaster assists with depth of field calculations, and PhotoCalc adds hyper-focal distance calculations, exposure reciprocity, flash exposure calculations and a sunrise/sunset guide.

ENTERTAINMENT

When it's time to sit back and relax at the end of the day, or you've just got a few minutes to kill on the bus, your iGadget can deliver a world of entertainment.

Apple has its own bookstore but, if you'd rather look further afield, there are plenty of options. If you own an ebook reader, then this should dictate your app – Amazon's Kindle ecosystem is very slick, letting you switch between devices and pick up at the same page. If you prefer to buy Adobe-protected ePUB books elsewhere, however, then you should

check out the Kobo and Google Play Books apps.

Music fans should check out Spotify and Rdio, two great apps that offer access to vast music libraries for \$11.99 per month (Page. 58 has more). Both services work on a wide range of devices and let you save music for offline access. Meanwhile TuneIn Radio makes it easy to tap into the online simulcasts of radio stations from Australia and the world.

If you want to catch up on your favourite TV shows, then you'll find apps from all five of Australia's major free-to-air television networks – ABC iView, SBS On Demand, PLUS7, 9Jumpin and TENplay – plus Foxtel subscribers can use Foxtel Go. ABC and SBS's efforts are the most impressive, with slick menus and a wide range of content. Finding your favourite shows on the commercial catchup services is a lot more hit and miss.

Australians are also spoiled for choice when it comes to subscription video services. Foxtel Play offers access to Foxtel packages without the need for a home Foxtel subscription, but for around \$10 per month you'll find all-you-can-eat video libraries from Quickflix, Netflix, Stan and Presto Entertainment.

Netflix is the pick of the bunch here, thanks to the great picture quality, smart recommendations and ease with which you can jump between devices to keep watching where you left off. If you start using your Netflix account on multiple devices, it lets you create different user profiles – so Netflix's movie recommendations for you aren't influenced by the fact that your children like to watch cartoons.

If you're streaming video around your home, then take a look at the Plex app, combined with a Plex server running on a computer or Network Attached Storage drive. The great thing about Plex is that it can transcode video on the fly, letting you watch formats like MKV, which iOS doesn't support natively. You can even stream video over the internet when you're away from home, or save videos for offline access if you have a Plex Pass subscription.

FIVE PODCASTS FOR BUSINESS OWNERS

BY ANTHONY CARUANA

Trying to keep up with what's happening and why it's happening is a significant challenge in the business world. While it would be nice to be able to simply work every day and bring in enough money for life's essentials, the reality is that savvy operators have an eye on what's happening around them as well as managing the day-to-day challenges.

Podcasts are a great way of keeping up with news and to listen to experts who share their insight. They're also excellent sources of new trends and commentary from people who work at the coalface of business.

So, what are the best business podcasts out there? There are literally hundreds to choose from. We've focused on podcasts that have been around for a while – lots of podcasts start, but few manage to produce high quality content regularly over a long period of time. We've also narrowed our field to programs that are quite short, so that you can listen to a whole episode while driving between client sites or when you have just a few minutes of quiet time.

THE \$100 MBA

The \$100 MBA isn't just a podcast. It boasts that it's "a complete business education and community".

The \$100 MBA Show is a daily 10-minute podcast that delivers a short business lesson drawn from the \$100 MBA courses. The topics are broad. We particularly like that you can look back at the titles to find a podcast to assist with very specific problems. For example, recent episodes dealt with how to fire an employee, how to hire a virtual assistant and dealing with doubt.

HBR IDEACAST

The Harvard Business Review is one of the most respected business journals. Its



writers are among the most respected business leaders in the world. The *HBR IdeaCast* is a weekly podcast of about 20 minutes duration.

Each episode follows up an article from the journal with an interview with the author. As well as some practical advice, there's some in-depth discussion about specific issues. For example, a recent episode dealt with how to stimulate innovation in a business – something that many businesses strive for but struggle to implement.

350 THIRD

Very few businesses have been immune to the effects of the internet over the last decade or so. If there's been one constant over that time, it's been disruption. *350 Third* is a podcast that focuses on the impact of the internet on business.

The podcast is hosted by Anders Brownworth and Scott Barstow and is really a discussion between two friends about interesting topics. They release a new 20-to 30-minute episode every two weeks or so – the schedule seems a little fluid. Although they discuss quite technical terms, they do it without burying listeners in piles of technical jargon.

CT SMALL BUSINESS TOOLKIT

Short interviews from established experts – it seems to be a solid formula for a successful podcast and the *CT Small Business Toolkit* sticks to it.

Each weekly episode is about 10 minutes long and focuses on just one topic. Most episodes are based on an interview with an expert or author. However, some are more topical. For example, following the Sony hack, an episode focused on avoiding email embarrassment.

MANAGER TOOLS

There are times when all you want is to quickly dip into a library and grab something to answer a specific question.

Manager Tools is a library of over 500 podcasts, each of about 30 minutes duration, that you can dip into as you need.

New topics are added regularly although there doesn't seem to be a specific schedule. Some weeks there's one new episode, other times there are more.

TWO MONEY APPS FOR TRACKING, ORGANISING AND REPORTING YOUR FINANCES

BY LIANE CASSAVOY

Between budgets and taxes, it's time to get organised. These apps will help you track, categorise and report your finances, saving some annoying steps along the way.

EXPENSIFY

Expensify's tag line is "expense reports that don't suck". No matter how you phrase it, expense reports do suck, even when they promise to return your money. But Expensify, a web and mobile app, manages to make them almost painless.

It does that by connecting directly to your bank or credit account (with your permission, of course) and importing and categorising expenses for you. Creating an expense report is as simple as clicking a few boxes on a screen. You can submit your expense report via Expensify, too, though that process will be streamlined if your entire company is on board with using the service.

Adding expenses via the mobile app, available for Android, BlackBerry, iOS and Windows Phone devices, isn't quite as automatic, but if you have to enter expenses manually, it's as pain-free as possible. I like how easy it is to track mileage or time using the mobile app, making it a snap to get reimbursed for travel or to bill for hours worked. Its SmartScan feature lets you snap a picture of a paper receipt using your device's camera, and then it analyses the picture for the amount and date. Note that if you don't capture the date - a mistake I made a couple of times when trying to scan a long receipt - SmartScan may hang for a bit and then report an error.

When tax time hits, you'll be glad you have all of your expenses stored in Expensify. It smartly categorised my expenses and it made them easy to search when I needed to organise my paperwork.

Expensify is available as a web app and a mobile app. It's free to use for individuals, with paid pricing options starting at US\$5 per user per month for smaller organisations (non-profits, students, churches) and US\$9 per month for most businesses.

IXPENSIT

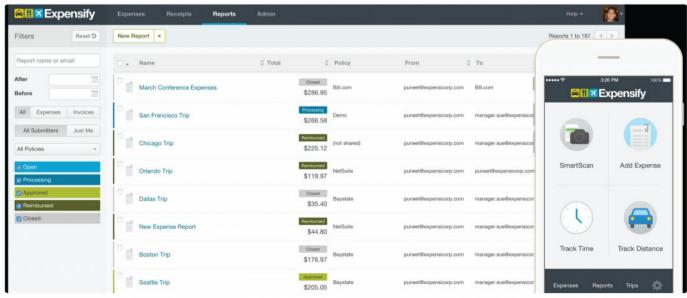
The iXpensit iOS app is designed to help you set a budget and stick to it.

To create a budget, you simply set the amount you'd like to stick to, and the time period in question. You then enter expenses and income as you go, by manually entering them using the app. As you spend and make money, you can see at a glance how your budget is holding up.

I wish iXpensit would make things a little more automatic, by syncing with your banking and credit accounts. That would speed up the process considerably. Still, entering things by hand isn't difficult, and I like that you can set up recurring expenses for items you pay regularly, such as your rent.

iXpensit includes an option for creating an expense report, which is a simple task once you've entered your expenses. The resulting PDF is polished and I especially like how it automatically attaches any photos of receipts you've snapped and stored in the app. These reports aren't only for submitting expenses: you can sort them by category and time period, making them useful when you're organising expenses for tax reporting purposes.

iXpensit is available in two versions, a free Lite version that's ad-supported, and a \$6.49 paid version. It's a handy way to create and stick to a simple budget, but tracking expenses feels like a little too much work.



Simple layout. Expensify is well designed for the small screen of your phone.

APPLE WATCH: A BILLBOARD FOR ADS ON THE WRIST?

BY ZACH MINERS

Questions abound over how Apple's Watch will function when it's released in April. But here's one feature: it will be able to serve ads, based on the location of wearers and their purchases.

At least, that's the vision laid out by TapSense, a mobile advertising exchange that has launched what it calls the first programmatic ad platform for the Apple Watch. The platform, the company says, provides a number of tools to let developers and brands place ads on the unit that can be targeted by location, through the GPS on the user's paired iPhone and the wearer's purchase history, through the watch's integration with Apple Pay.



Coffee Offer Mockup courtesy of TapSense.

Relevant location-based ads are considered the holy grail of mobile advertising, and more companies like Facebook and Google are trying to tie people's purchases in physical stores to digital ads. Still, the prospect of super-targeted ads on the Apple Watch following wearers around might strike some as a disappointment, given the unit's already steep starting price of US\$349.

And TapSense seems quite bullish about how far marketers could take this. "Apple Watch has the potential to be a category disruptor similar to iPod or iPhone and we believe that it provides great opportunities for brands and developers to deliver engaging experiences to consumers," said Ash Kumar, co-founder and CEO of TapSense, in the San Francisco-based company's announcement.

The accessibility of the Apple Watch makes it an ideal device for hyperlocal offers such as retail store coupons, TapSense said, better than a smartphone inside a person's pocket. And because the watch will support Apple Pay, Apple's new mobile payments service, marketers could measure their campaigns based on people's purchases in stores, the company claimed.

GOOGLE ADDS
REAL-TIME SPELL
CHECK, BETTER
ACCESSIBILITY
FEATURES TO
DOCS, SHEETS
AND SLIDES

BY DEREK WALTER

Google is boosting the mobile versions of its Docs, Sheets and Slides apps on Android and iOS with some extra features.

Google spelled out the changes in a blog post in January, noting that with Docs you now get the familiar red line underneath incorrectly spelled words as



Safer. Google Docs on iOS now support Touch ID.

you type. This should help you check for accuracy while banging away on that touch-screen keyboard.

In Sheets you can now hide rows and columns, which could be useful for making the most of the precious screen real estate on a mobile device. With Slides, you're now able to group different objects together by dragging them around the screen.

The iOS versions now support Touch ID, so you can log in to Docs, Sheets or Slides with the fingerprint scanner.

Google is also supporting its own TalkBack on Android or Apple's VoiceOver, accessibility services which will read the contents of the screen.

Google is in a race with Microsoft to rule productivity in the office and classroom. Google Apps are also a key part of the company's push into education, where the company has found particular success with Chromebooks. And with kids and their parents all sporting phones and tablets, it needs to keep those new features coming to make Google's apps the more appealing choice over Microsoft Office.

SLACK ADDS MAJOR ENTERPRISE COLLABORATION FEATURES, UPTIME GUARANTEE

BY MATT WEINBERGER

Slack (www.slack.com), the startup that bills itself as IRC for the enterprise, has been on something of a winning streak lately – it's

been the darling of the Silicon Valley set since late last year and took in US\$120 million in funding last October to solidify its position.

The same day Facebook announced a pilot of its long-awaited Facebook for Work platform, Slack unveiled a US\$12.50/user/month 'Plus' subscription plan for large enterprises outside of the startup's usual small-team wheelhouse. The new plan includes support for single sign-on (SSO), data export for compliance purposes and a four-nines uptime guarantee, plus access to a priority lane for customer service, according to Slack's statement.

In true Slack fashion, the SSO support comes by way of third-party integrations: Okta, OneLogin and Bitium, all of which offer identity solutions that give employees one username and one password to access the lion's share of their cloud apps.



The data export feature lets larger organisations periodically lug out and store their entire chat records in a separate silo. This is critical for enterprises where everything has to be searchable for regulatory compliance or just for the sake of keeping a record. Slack promises fine-tuneable controls for what is and isn't exported.

Finally, Slack Plus is backed by the aforementioned 99.99 percent uptime guarantee, and it's putting its money behind it with a money-backed service-level agreement (SLA) that guarantees a 100-times payout for whatever you paid for Slack that month.

Slack is popular, with a claimed "365,000 daily active users across more than 45,000 teams", with customers including *The New York Times*, Comcast, Buzzfeed and Adobe. Those tend to skew towards a younger, more connected set.

But with the new 'Plus' features, combined with its continuing expansion of compatible, interlocking external services, it's making a much needed move toward larger enterprises. That could prove valuable as Facebook turns its all-seeing Eye of Sauron towards enterprise collaboration, not to mention existing rivals like Atlassian with HipChat and Microsoft with, well, Microsoft.



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MICROSOFT PREVIEWS ONEDRIVE FOR BUSINESS FOR THE MAC

BY GREGG KEIZER

Microsoft has released the promised preview of OneDrive for Business for OS X, the first way to sidestep the browser when accessing company documents and the only way so far to sync files for offline use on a Mac.

The app requires an Office 365 business-grade subscription, and can replace in most instances the browser UI (user interface) that was previously the only available to OS X users.

The OneDrive for Business preview on OS X integrates with the Finder, Dropbox and iCloud Drive – the latter, part of Apple's own iCloud storage and sync service.

Unlike those alternatives – or OneDrive, the consumer-grade service Microsoft also offers – OneDrive for Business is exactly that, focused entirely on documents shared by employees at a company with each other and invited outsiders.

It corresponds to the OneDrive for Business client for Windows 7, Windows 8 and Windows 8.1.

Once added to the Finder, OneDrive for Business operates as any other local folder – or for that matter the cloudbased doppelgangers like Dropbox – allowing drag-and-drop and one-click file launching as usual in OS X.

During a brief test, OneDrive for Business on our Mac was easily able to locally synchronise an Office 365 library to a MacBook Pro, upload documents to the cloud, open those stored there using the Finder and deposit documents into a folder that was previously shared with a manager.

Neither the OS X or Windows OneDrive for Business client lets users share folders; that must still be done from a browser

Office 365 enterprise subscribers now have a 1TB storage allowance, although Microsoft is rolling out unlimited storage to those customers this year.

Microsoft also released a revamped OneDrive iOS app the major enhancement of which was to combine both OneDrive (consumer) and OneDrive for Business (commercial), but keep the content segregated.

OneDrive for Business for the Mac requires OS X 10.9.5 and later (Mavericks and Yosemite) and can be downloaded from Microsoft's website. The free iOS OneDrive app is available for Apple's App Store.



THE NEW OUTLOOK MOBILE APP AIMS TO BE YOUR ALL-INONE MAIL AND CALENDAR SUITE

BY DEREK WALTER

The Microsoft Outlook app for iOS and Android is here, dropping in the final puzzle piece to the company's 'Office everywhere' vision.

They're in the App Store and Google Play now, though the Android version is technically a 'preview' build. Microsoft says once it gets enough feedback and makes the necessary tweaks it will deem it a final version, just as it did with Office for Android.

If you've used Accompli before, the new Outlook should look really familiar. That's because Microsoft purchased Accompli and has re-engineered the app to take the place of its rather terrible Outlook Web App and Outlook.com Android app.

By the looks of it the best features are still there. For example, just like Google's Inbox or Mailbox you can swipe away messages for archiving, deleting or later retrieval. However Outlook lets you customise these gestures instead of locking you into one system.

It also has a separate tab for calendars, people and files. You can view or attach to a message documents, images or anything stored in OneDrive, Google Drive or Dropbox. You can also send out calendar invites and check others' availability, a key feature of using Outlook on the desktop.





The home for business-minded Apple users on macworld.com.au

While many Mac, iPhone and iPad owners use their devices for purely personal pursuits, there are those who document, record and share as part of the their day to day work. What are the most efficient and effective hardware and software options for your needs? How can you start using it immediately to drive sales, connect with colleagues, create powerful presentations, reduce communication charges?

We examine the latest technology for enterprise users to help you make the best use of your time and resources for your business.

Jonathan Stewart - Editor of Macworld Australia

We started this section as we appreciate that technology is a critical foundation for the success of your business.





GADGETGUIDE







ClamCase Pro

The ClamCase Pro makes your tablet look, feel and be usable as a fully functional laptop. It has a 360-degree hinge so you can use the tablet in a stand, or fold up for use simply in tablet form. The lithium battery allows you to use the Bluetooth keyboard for more than a month between charges. Available for the iPad mini and iPad 2/3/4, Air and Air 2.

Macfixit www.macfixit.com.au \$189.99

LaCie Mirror

The LaCie Mirror is typical top-notch LaCie technology – a 1TB hard drive for all your storage needs. But where it really shines (literally) is in the design, with a mirrored surface designed by Pauline Deltour and an ebony wood display stand. The drive is encased in Corning Gorilla Glass 3 and is powered by its USB 3.0 connection.

LaCie www.lacie.com/au TBA

Zivix Jamstik+

The Jamstik+ is a 'smart guitar' that can connect to your iOS device via Bluetooth LE and can connect to a Mac or PC via Wi-Fi. It's useful as a learning guitar, but it also has an improved magnetic pickup to make the instrument more satisfying for experienced players. An accompanying free jamTutor app helps players get going.

Zivix www.jamstik.com US\$299.99 + shipping





Groovemade Walnut Monitor Stand

The Groovemade Walnut Monitor Stand gives your monitor a lift and provides a space to store your keyboard, mouse, hard drive, books and more. Cork feet protect your desk from scratches and, because it's made of walnut, the stand can support up to 90kg of weight. The stand measures 53cm long, 23cm wide and 10cm high.

Groovemade

www.grovemade.com

US\$119 + shipping

Puzlook SLR Multi-Lens Mobile Photo Case

The Puzlook SLR Multi-Lens Mobile Photo Case for iPhone 5/5s sports five add-on optical lenses for your camera arranged like the pieces of a 15-puzzle of sorts in its back plate. The 70g case includes an 8GB USB memory stick that doubles as a handsfree support and comes in black, white, silver or pink.

Puzlook

www.puzlook.com

US\$139.95 + shipping



The Shockdrop is a rugged case with a focus on shock absorption and damage prevention. Available in black or red, the iPad Air 2 case turns into a stand in landscape orientation with two viewing angles; for extra peace of mind, it also features reinforced corner rubber bumpers, an integrated screen protector and a port cover.

Hard Candy

www.hardcandycases.com

US\$59.95 + shipping

Logitech UE Megaboom Speaker

The cylindrical 21.1cm high, 360-degree speaker has a waterproof and stain resistant body. It has a Bluetooth range of up to 30 metres and battery life of up to 20 hours. The free UE MEGABOOM app offers an expanding set of features and further customisation. The speaker is available in black, red, blue and purple.

Logitech

www.logitech.com/en-au \$349.95





APP GUIDE Cool software for the iPad, iPhone & iPod touch.



KINGDOM RUSH ORIGINS

GAMES Ironhide Game Studio iPHONE & iPAD \$3.79

The Kingdom Rush series has been a staple of iOS tower-defence fans' diets for about four years now, thanks to its cartoonish artwork with an intuitive battle

system, numerous humorous nods to other media, and an ever-increasing rewarding set of challenges. The latest entry in the series, *Kingdom Rush Origins*, further sharpens the enchanted blade — giving players more maps, heroes and towers to unlock. Not much has changed from the last go-around - 2013's Frontiers - except the focus has narrowed, giving the units and the level-design a more streamlined, organic feel. Origins may not be a reinvention for the series, but it's so sharp and interesting in just the right places that this may be the best Kingdom Rush to date.





QUICKIE MESSENGER SOCIAL NETWORKING Hopflow

iPHONE FREE



A new service called Quickie is getting in front of the first wave of apps made for the wearable age. You text, draw, create GIFs of your voice or record voice messages and send them instantly. Your recipient has time only to glance at your message before it disappears. If your note goes unopened, it'll stick around for 24 hours before vanishing.



BE MY EYES LIFESTYLE Be My Eyes **iPHONE & iPAD** FREE



This free app is for two kinds of people: vision impaired folks and sighted folks who want to help them. If a vision impaired person needs help identifying something, they can start up a live audiovisual connection and aim the iPhone's camera at the object they need help with. Sighted folks will be alerted that help is needed and open Be My Eyes to help.



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Prime Circa **iPHONE & iPAD FREE**



Choose a template some are free, some paid – from one of six categories: Holiday, Birthday, Congratulations, Love, Everyday and

Anniversary. Add your own photo, then add your handwriting - either by finger or stylus – and finally share your Lovely Handwritten Cards via email or social networks. Templates are available as in-app purchases.



ALLCAST PHOTO & VIDEO **AllCast**

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This free iOS app can stream media from a variety of sources — including Dropbox. Google +, Google Drive and Instagram - to your television, through any number of web-to-TV devices, including Apple TV, Roku, Chromecast and more. Spend \$6.49 and you can get AllCast Premium to watch ad-free and without any caps on video length.



CHROME REMOTE DESKTOP UTILITIES

Google

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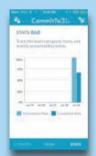


Chrome Remote Desktop for iOS lets you access your computer desktop remotely from your iPhone or iPad. You'll have to install the Chrome Remote Desktop app from

the Chrome Web Store on the computer you want to access, but after that, connecting from your iOS device is relatively easy.



COMMITTO3 PRODUCTIVITY Oceanhouse Media iPHONE FREE



A simple idea: commit to three tasks to complete each day. It has social aspects — the app emails you when friends complete their three tasks for the day. (It's helpful in team settings, such as when a work group is trying to complete a project.) There's a free seven-day trial; after that you'll need to pay \$3.79 a year.



DUE PRODUCTIVITY Phocus iPHONE & iPAD \$6.49



Version 2.0 of Due has arrived, redesigned to take advantage of the expanded real estate available on the iPhone 6 and iPhone 6 Plus. The app reminds you to accomplish tasks and keeps reminding you until you

check it off or postpone the item in question. You have snooze options of five, 10, 15 and 30 minutes.



HOTEL MY PHONE

SOCIAL NETWORKING pplconnect iPHONE FREE



Remember call forwarding? Hotel My Phone does pretty much the same thing that old landline feature did — route calls and texts to a friend's iPhone. Why would you do that? Because the battery on your iPhone is low and you wanted to stay in touch with the outside world.



SUNBURN! GAMES Secret Crush iPHONE & iPAD \$3.79

In the case of *Sunburn!*, that hook is the premise: the charming, albeit terribly grim plot point that ultimately defines the experience. You play a spaceship captain whose cruiser has just been smashed to bits by a glowing ball of light. Despite having no means of communication or tools to survive a long stretch in space, you nonetheless decide to honour your promise that no member of your crew will die alone. Which means gathering everyone up and plunging straight into the nearest sun for a brutal, albeit oddly noble group death. And *Sunburn!* sells it perfectly with a colourful, retro-inspired aesthetic and plenty of humour injected via goofy crewmember quips and spacesuit-wearing pets.





f you're still using an iPhone that's two or more generations old, the chances are that it isn't as nippy as it used to be. The interface seems more sluggish, apps take longer to open or run – it just isn't the swift device you remember. Maybe it's been performing more slowly since you installed iOS 7 or iOS 8. But there are some techniques we can use to speed up an ailing older iPhone.

Apple's iPhone 6 and iPhone 6 Plus are its flagship smartphones, but older models remain popular: the iPhone 5s and 5c are still sold by Apple as budget alternatives, and plenty of Apple fans continue to use a beloved iPhone 4s, iPhone 4, iPhone 3GS or even older iPhone.

But is your iPhone still performing? All computing devices are prone to slowing down over time, as their memory fills up and extra software is installed, but the way iPhones use their memory makes them less prone to this than most.

It's possible that it just feels slower than it used to, because you've got used to what initially seemed dazzlingly quick operation, or have started to compare it to friends' newer, faster models.

But sometimes it's possible to make a direct comparison: when there's an app you used to enjoy but has since become unusably juddery. Such a situation is what led to this feature. The wonderful, super-fast game *Super Hexagon* demands lightning reflexes to survive, but the stuttering graphics on our iPhone 4 now make it impossible to play. We've also been seeing problems with the iPhone 4 handling of *Temple Run 2*.

Here are some great methods to speed up an iPhone 3GS, iPhone 4, iPhone 4s or even iPhone 5, iPhone 5c or iPhone 5s, if you're not happy with the way it's running.

IS YOUR IPHONE UP TO DATE?

Apple's most recent operating system for the iPhone and iPad is iOS 8. On older smartphones, it's possible that upgrading will slow down your iPhone a bit, but on some occasions it may even help it run faster. (The iPhone 4 and earlier aren't compatible with iOS 8 upgrades at all).

Check whether your iPhone is up to date by heading to *Settings > General > Software* update.

SHUT DOWN ALL OPEN APPLICATIONS

Let's start with the easiest solution: closing down all non-essential apps. Double-click

Clean up and restore the speed of an iPhone 3GS, iPhone 4, iPhone 4s, iPhone 5, iPhone 5s or iPhone 5c running iOS 6, iOS 7 or iOS 8. BY DAVID PRICE. the Home button to bring up the currently running apps in iOS 7 or later. Swipe upwards to close them. You can swipe with up to three fingers to speed up the process a little bit. Irritatingly, there's no way to close them all at once. We're going to close down everything, then start again from scratch.

REALLOCATE THE MEMORY

The iPhone 6 and 6 Plus have 1GB memory, but older phones have even less. Apple doesn't make reallocating this RAM type memory easy, but there is a way you can do this and therefore speed up your iPhone.

Download the free Battery Doctor app (www.cmcm.com). We use this primarily to reallocate our memory on our iPhone. If you find that you're using up lots of memory, tap 'Boost' and watch as the app reallocates the memory and helps speed up your phone.

We're not sure how long this app will stick around, as it seems that the memory feature has been removed in the past before reappearing in new versions of the app.

Hopefully Apple will make memory handling better in the future.

RESTART

Let's restart the iPhone completely. Press and hold the Sleep button (the one on the top right of the iPhone) until the Power Off slider



RAM. Battery Doctor can help you 'boost' your memory.



Quick sweep out. Clearing your Safari history can save a little room.

appears. Swipe it and wait for the iPhone to power down.

Once it's finished (it'll take about 10 seconds or so), start the iPhone up again by pressing and holding the Sleep button for about five seconds. You'll see the Apple icon for a minute or so, then the iPhone will restart.

You shouldn't have to do this very often, but when you do it'll clear out the memory space and can often fix unruly apps.

CLEAR YOUR SAFARI COOKIES AND DATA

Let's try emptying Safari's data, cookies and so on to free up some memory.

Open the Settings app and scroll down to Safari. Here you can choose Clear History and Clear Cookies and Data. (Bear in mind, though, that Safari will no longer suggest URLs as you type, unless they're bookmarked.)

KILL AUTOMATIC BACKGROUND PROCESSES

Getting rid of automated features will help keep your iPhone running faster in iOS 7 and iOS 8, and help extend your battery life as well. If you're running iOS 6, you can skip this step as Apple didn't introduce these features until iOS 7.

Turn off Automatic Downloads. Tap *Settings > iTunes & App Store* and turn Automatic Downloads off. If you spend a lot of time uploading Music, Apps and Books you may want to turn off those as well.

Turn off Background App Refresh.

Tap Settings > General > Background App Refresh. Turn Background App Refresh off and tap Disable Background App Refresh.



Pause it. Halt the automatic download of Music, Apps, Books and updates to be more selective over what should be on your device.



Stop it. Switch off Background App Refresh to stop apps from functioning in the background and using your battery and memory capacity.

Both of these are luxury items. You don't need them and you'll see a big boost in battery life as well as a noticeable increase in performance.

TURN DOWN THE GRAPHICS

Again, iOS 6 users can skip this step because it only relates to iOS 7 and iOS 8, which introduced some fancy new visual effects.

Turn off Motion. Tap on *Settings* > *General* > *Accessibility* > *Reduce Motion* and set Reduce Motion to On. This turns off the parallax effect of icons and alerts (many people find it easier to use in this setting).

Increase Contrast. Tap on Settings > General > Accessibility > Increase Contrast and set Reduce Transparency to On. This disables the see-through background effects, which speeds up iOS 7 and iOS 8. It's most noticeable in Control Center that will now have a solid background and should work much faster.



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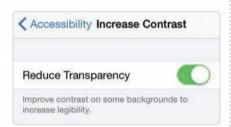
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Stay still. Stopping the parallax effect reduces the number of tasks the iPhone needs to complete.



One layer at a time. Disabling the see-through effects will mean a flatter looking operating system.

Both of these will help with battery life, but are especially helpful for speeding up iOS 7 and iOS 8.

DELETE TEXT MESSAGES

We'll continue on our quest to free up memory by going through the Messages app and deleting everything that we don't need to save.

Open Messages and scroll down to find any message threads that you can manage without. Swipe from right to left and tap Delete.

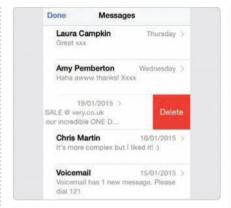
DELETE UNNECESSARY SONGS, PHOTOS AND VIDEOS

OK, let's get serious and free up a lot more memory. Open the Settings app, then tap General, and Usage like you did when we were uninstalling apps. You'll see how much storage space is left and which apps are using up most of the space.

If you're anything like us, the top two culprits will be Music and Photos & Camera, because these apps' storage usage includes music, images and videos. We'd suggest keeping at least 1GB free just to make sure there's some free space for iOS to shunt files around without having to do too much juggling.

Open the Music app and find the nonvital track, album or artist that you want to delete. Swipe to the right and press Delete.

Plug the iPhone into the Mac and open Image Capture (assuming you've not set it to open automatically when it detects an



Don't need, don't store. Swiping to the left is an easy way to delete messages and save space.

iOS device). Tick the option 'Delete after import' at the bottom left.

Click the photo you want to copy across, or select multiple consecutive photos using the Shift key, and drag and drop them into a folder on the Mac. You'll see a green tick appear next to them in Image Capture, to show that they've been downloaded.

If there are any photos on there that you don't want to keep but still want deleted from the iPhone, select them and click the red circle at the bottom. Image Capture will confirm you want to delete the photo.

Of course, you can also delete photos on the phone itself. Open the Photos app, find the images you want to delete, tap 'Select' and then tap on the images you want to delete. Then tap the bin icon and confirm to delete the photos and videos you've selected.

RESET

A more drastic step than restarting the iPhone, a full reset takes longer, but is a more effective way of solving problems with the way an iPhone is running.

Press and hold the Home and Sleep buttons at the same time. Keep holding them while the screen goes black (the red power-off slider may appear; if it does, just carry on holding the buttons), right up until the silver Apple logo appears. When that appears you can let go.

RESTORE FROM BACKUP

The next stage after resetting the iPhone, getting steadily more drastic as we go, is restoring it from a backup.

If you've backed up recently, you can simply restore from that. Plug the iPhone into the Mac and open iTunes.

Click the iPhone (if you've plugged in more than one iOS device it may say '2 devices' or similar instead). Under Backups, click 'Restore Backup...' (To back up your iPhone into iTunes, click the Back Up Now button next door.)

Of course, that's going to undo all of the changes you just made to your device (deleting apps, removing unwanted music etc), unless you backed up your iPhone afterwards.

RESTORE TO FACTORY SETTINGS

Finally, the most drastic step of all: we're going to perform a full restore, which deletes all the data on the iPhone and returns it, in effect, to the state it was in when you bought it. (Except that the hardware components will still have suffered a number of years of wear and tear, of course.)

Since we're deleting all the data, it's vitally important that you back up the iPhone: either back up to iTunes, as described above, or to iCloud. (To back up to iCloud, Open the Settings app, then scroll down to iCloud, then Storage & Backup, then Back Up Now in iOS 6 or turn on iCloud Backup in iOS 7 and iOS 8).

Now you can restore the iPhone to its factory settings by going to *Settings* > *General* > *Reset* > *Erase All Content and Settings*. You'll then have to enter your passcode if you've got one, and then confirm that you want to delete all media and data, and reset all settings.

After a few minutes of restoring, you'll be presented with the welcome screen you saw when you first started up the iPhone.

CHECK YOUR WARRANTY

If none of the above techniques work, it's time to decide whether the speed of your iPhone is a serious enough problem for you to take it up with Apple. If there's a problem with a component, the issue may be covered by your Apple warranty if you have one.

GET A NEW IPHONE

If Apple can't help, or their help is too expensive to be worth it, we reach the final option: give up on your older iPhone and buy something newer.

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DocMoto is a powerful and sophisticated document management tool that allows you to track everything you do with any type of document. If you're in business – any business – the bigger you get, the more likely it is that tracking and managing documents is one of the biggest challenges you face. DocMoto is a server-based application designed to manage every document your organisation touches, from email messages to Office documents. It tracks changes, controls access, maintains revision histories, locks documents for editing



and guarantees that everything you do is centralised, organised and easy to access. DocMoto is a client-server application that you purchase either as a cloud-based, hosted service or that you can install and host on your own servers. Available via www.docmoto.com.



APPSOMNIA UTILITIES emreoktem \$1.29



Don't you hate it when you're watching a video and your Mac goes to sleep? AppPlunger's Appsomnia takes care of that problem by preventing power savings from kicking

in on command. The app sits quietly in the menu until called upon and allows you to disable sleep mode permanently or for a set period of up to three hours to keep your screen from getting damaged in case you forget.



CALENDARMENU PRODUCTIVITY Alexander Lindenstruth \$4.99



Developer Alexander Lindenstruth's CalendarMenu puts a convenient calendar right in your menu. ready to serve you at the click of a mouse.

The app comes with several different display options and integrates with your calendars, showing busy and free times. On OS X Yosemite, it also provides a handy Today widget that shows you the current month.



POSTERINO 3 PHOTOGRAPHY Christoph Priebe \$24.99



Have a ton of photos and you're not sure what to do with them? Zykloid Software's Posterino helps you turn them into beautiful collages. With an intuitive workflow, the app allows you to pick your pictures,

choose from one of its design templates and add your own touches from text to filters – to the end result.



SITESUCKER UTILITIES **Rick Cranisky** \$6.49



Ever wanted to keep an offline copy of your favourite websites? SiteSucker works by analysing a website you point it to, and downloading everything needed to view it locally – even if you are disconnected from the

internet. Its sophisticated engine can handle even the trickiest sites, and lets you decide how 'deep' into the site's hierarchy you want to go.



RESOLUTION CHANGER UTILITIES IT Top





IT Top's Resolution Changer is a simple utility that lets you quickly change resolutions directly from your menu. The app can handle every screen configuration supported

by your monitor, including scaled configurations that offer either a lower resolution or a larger field of view.



SPARKLE GRAPHICS & DESIGN River SRL \$99.99



Ready to unleash your inner designer? Sparkle makes easy work of creating stunning web pages for everything from your favourite hobby to your business. The app comes with a number of professionally-built templates that

can be edited visually without needing to know any web technologies like HTML and CSS, supports high-resolution graphics for Retina screens and has output standards-compliant code that works on most browsers.



WIFI SCANNER UTILITIES AccessAgility \$4.99



Unless you live in the middle of nowhere, chances are that your wireless router is fighting for spectrum with its neighbours, potentially slowing you down and making your internet experience less pleasurable. AccessAgility's WiFi Scanner helps you solve this problem by showing

you all the access points nearby and suggesting the best configuration settings to get the most out of your router.



ELMEDIA PLAYER VIDEO

VIDEO Eltima FREE



Eltima Software's Elmedia Player: free video player may be worth a look if you are struggling with

video formats. This versatile player can play a veritable alphabet soup of formats from FLV to MKV and MOV, without requiring the installation of external codecs or plugins, is capable of streaming movies directly from a web address and even lets you edit the subtitles stored in your files.



AUDIO HIJACK 3

AUDIO Rogue Amoeba US\$49; US\$25 (UPGRADE)

Audio Hijack Pro has been a longtime favourite of many who wish to capture sound routed through their Mac — whether from apps or audio input devices. Inventive and powerful though the app was, however, its interface could be challenging to the uninitiated. With the release of Audio Hijack 3, the company has taken a large stride forward in making the app both capable and easy to use. It's no mean feat to rethink an interface so that an app takes on a new life. If you're a current user of any version you can upgrade for US\$25. And you should. If you've stayed away because of its challenging interface, it's time to give it another look. Available via www.rogueamoeba.com.



The four Mac security options everyone should know

BY TOPHER KESSLER.



Illustration by David Lemm

s our lives increasingly go digital, security is a major concern not only for the various online services we use, but also for the devices on which we save our data. Chances are that if you're reading this article, you own a Mac. And on your Mac, you'd like much of the work you do on it to be kept private.

While OS X is relatively secure by default, there are some additional steps you can take to ensure the data on your Mac can only be accessed by you, even if your Mac is stolen. Take the following tips to heart to better protect your Mac and its data.

ENABLE THE OS X FIREWALL

The firewall in OS X is a network filter that allows you to control which programs and services can accept incoming connections. While classic firewalls do this on a per-port basis – regardless of which software is using the port – OS X's firewall can work on a per-application or per-service basis, giving you more flexibility.

The firewall is a good option to enable if you're connected to a public Wi-Fi network, such as one at a café, library or other hotspot. For home networks you can usually rely on your router's firewall for protection,

TO SET UP YOUR FIREWALL,

go to the Security & Privacy system preferences, click on the Firewall tab and then unlock the preference pane (1), after which you will be able to click the Turn On Firewall button (2).

This basic option is the best for most purposes, but you can also click the Firewall Options button (3) to see the specific settings for each application as well as access some additional features such as an option for blocking all connections (4) and stealth mode (which hides your computer from outside access attempts) (5).





though enabling the OS X firewall for added security generally won't cause additional problems.

ENABLE FIREVAULT

FileVault is the full-disk encryption routine in OS X that will secure all files on the drive, including OS X system files, applications, caches and other temporary files – any of which may contain personal or sensitive information.

Store passwords.
Third-party password tools such as 1Password provide expanded password management.







TO SET UP YOUR FIREVAULT, go to the FileVault tab of the Security & Privacy system preference, unlock the preference, and click Turn On FileVault (1).

When you do this you'll be asked to choose the user accounts that are authorised to unlock the disk (2) (you can add other accounts later, if you like) (3).

After you enable users, you'll be given a recovery key, which you should record and keep in a safe place. It's the only way to decrypt your drive if you forget your password. Click Continue.

You have the option to have Apple store the recovery key. To retrieve it, you must provide the answers to three preset questions exactly as you typed them at this point. Don't make your answers so convoluted that there could be several different variants of the answer. Keep it simple. You can also choose to not have Apple store the recovery key.

Click Continue and your Mac will begin encrypting your drive. This may take a while to do, especially with large mechanical drives, where both encrypting and optimising may take a number of hours to complete.

Once the initial encryption process is done, you're all set. You Mac will automatically decrypt any files you need to use and encrypt any new files you create.

TO REMOTELY ACCESS AND TRACK YOUR MAC, open the iCloud



system preference and switch on the Back to My Mac (4) and Find My Mac iCloud services (5). With the first option checked you can access the sharing services you've enabled on your Mac. For example, with Screen Sharing turned on, your remote Mac will appear in the Finder sidebar, where you can click it and share its screen to view and interact with your remote Mac's desktop.

For Find My Mac, log into iCloud.com or use the Find My iPhone app on an iOS device, send it a command to lock it down unless a password is supplied, have it issue a sound, or remotely wipe the device.

Full disk encryption is primarily useful for protecting a stolen Mac. When your drive is unlocked, files on it can be read. However, before it's unlocked (i.e. your Mac is shut down), all data on the drive will be scrambled. This prevents data recovery by unauthorised third parties, who may try to access it using Target Disk mode on your Mac or by removing your Mac's hard drive and attaching it to another computer.

PASSWORD MANAGEMENT

If you use numerous online services regularly then you will (or should) have different credentials for each one.

These may be difficult to remember.

Often people store their credentials in a text, Word or Pages file for easy access, but this is a highly insecure way to store passwords. In OS X you have a built-in alternative for managing passwords called the keychain.

Unlike other security options, the keychain is enabled by default to store your various passwords for online services, email accounts, sharing

services and many other authentication routines. Whenever you see a checkbox for saving your password, or in a drop-down menu when using Safari, this is OS X asking you to store these passwords in an encrypted file called the login keychain.

This keychain can be managed using the Keychain Access utility (/Applications/Utilities). In most cases, unless you're troubleshooting your Mac, there's little need to use this utility. Instead, simply use the option to save your passwords and OS X will automatically enter them where appropriate.

There are some third-party password tools such as 1Password that provide expanded password management. If Keychain Access and Safari's ability to store passwords don't provide you with the features you need, try 1Password or a similar utility.

LOCKING AND LOCATING

A final couple of options for protecting your Mac include securing your

computer when you have to leave it unattended and enabling remote access to it – not only to interact with it from afar, but also to track and lock it down, if needed.

You set up the first of these options in the General tab of the Security & Privacy system preference. Just enable the Require Password option and choose Immediately or five seconds from the pop-up menu and you'll be required to enter a password to use your Mac after it's gone to sleep or the screen saver has started. The shorter the time interval you use in this feature, the better, especially for laptops. Just close the lid to lock the system.

Overall, while Apple can do very little to prevent your computer from being stolen, OS X does its best to protect the data it holds as well as offers a chance that you can pinpoint its location. With these options enabled, you can be sure your Mac's data is as safe as possible, with little to no inconvenience for you.



Family Sharing is convenient, but comes with its own risks

Apple should provide more granular controls for location tracking and families need to understand how device wiping works. BY GLENN FLEISHMAN.

o Mac is an island and every iPad is part of the main. But Apple has, for many years, had trouble with letting a group of allied people – let's call them a 'family' – make best used of shared devices and shared digital purchases. Family Sharing is the latest attempt by Apple to facilitate families' sharing (if not caring).

It comes with a hidden curse, though: families that share together can have all their devices wiped together and all track each other's locations, regardless of one's age. One could argue these are good things when you've chosen to opt into Family Sharing and location sharing. But, as your faithful writer keeps stressing, you have to know the risks in order to evaluate them.

FAMILY PLANNING

Family Sharing requires all the latest everything: iOS 8, OS X Yosemite and iTunes 12. On a Windows system, you need to install iCloud for Windows 4.

With all of that in place, Apple lets up to six people share media purchases across their own accounts. This includes apps (and in-app purchases), books and anything bought via iTunes. A single credit card can (must, actually) be used to make purchases.

Lou Hattersley wrote a comprehensive guide to Family Sharing in February, 'Family Sharing on an iPad, iPhone or Mac', But what I want to address is something I was alerted about via Twitter: Family Sharing extends to Find My iPhone and Find My Mac, as well as Find My Friends.

This all makes perfect and lovely sense. When my children are old

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Ask To Buy

Require approval for all Tunes, (Books, and App Store purcharmitated by Store will be responsible for all charges to y account.

enough that I want to send them into the world on their own, I expect to outfit them with iPhones, and absolutely want to be able to know where they are if something happens or just to know they've reached home safely without me having to have them check in.

But there's something a little interesting in how Family Sharing works. Even though you can denote specific accounts as belonging to 12-and-under humans, you can't



Get permission.

You can require that children's accounts check in before buying anything, but you can't tweak the location-sharing settings by age. Any member in a group can also select specific individuals from whom to hide their location until that member chooses to resume sharing with them or everyone.

prevent location sharing and other features from working across every device in a group, as opposed to just adults seeing everything and kids not unless the adults allow it. Even if Apple offered this option for younger kids, teens graduate from account restrictions at age 13.

That sounds trivial, and I don't have teenagers yet, but it would seem to defeat the purpose of keeping tabs on your kids as appropriate while also not letting them know when you're, say, returning from an evening obligation, and give them time to kick their friends out and spray air freshener all over. (Yes, kids, we're on to the air freshener.)

Adults could, of course, suppress their location by disabling Share My Location in *Settings* > *iCloud*, but then everyone in a group, including the other adult or adults, can't find them either. Let's not get coy about affairs and secret gambling habits and the like. It's a perfectly reasonable thing for an adult in a pair or other relationship

to not want to be tracked by other people at all times, even when they trust them with their lives. And if your 'family' is a group of people sharing a home and media, rather than a more conventionally structurally defined one, it becomes even more of an itchy topic.

Without getting into games of logics and ethics, like the Prisoner's Dilemma or Two Hens and a Fox Cross the River, this is the perfect panopticon of awareness of everyone's whereabouts in a group and the choice for someone to opt to be completely invisible isn't always the only desired option.

WIPE THAT SMIRK OFF YOUR PHONE

The related issue is that Find My iPhone and Find My Mac become available to everyone in a family. Every device you possess and every device that anyone in your communal group has logged in to a participating iCloud account is part of this collection. This is great when a device is lost

or stolen. Rather than that person having to get to a browser or iOS device to log in and track their device, anyone else in the family can pull up the information. This is awfully handy while travelling together ("Ah, you left it in the hotel!"). If you disable location sharing, Find My iPhone continues to work for your account, and still provides limited access to the rest of your family group. Another family member can determine whether a device has an internet connection. and can play a sound to help you or someone else find it. Here's a potential downside: with

Here's a potential downside: with location sharing enabled, every family member has the power to wipe every other device, iOS and Mac, that's part of the family group. Apple recognises that not all families are happy families, and that hardware might fall into the wrong hands. Thus, to erase a device belonging to another member of group, that member's Apple ID password is required.

So even in the hopefully unlikely event that one person has a device stolen or someone gains access to it and they have a password that can be guessed or is written down, that still only allows that malefactor to wipe the iOS and Mac devices belonging to that one account holder.

But this should alert you to the risk once again of writing down and sharing passwords. In a home with one or more shared computers, a sticky note on a monitor with the family's passwords – where it can be seen by family, guests, kids' friends or even a burglar – becomes an even worse idea than it's been for decades.

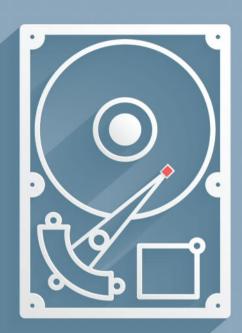
The advantages of Family Sharing for the right set of people aligned in a group are fairly large. But Apple should consider offering more finegrained controls than the coarse option of turning location sharing on and off for the family group, offering better mapping to how families of all sorts actually work.



Don't wipe it.
Keep your Apple ID password safe, or anyone in your Family Sharing group could wipe your device if they get angry enough at you.

How to use benchmarks to cut through marketing hype

Does deleting large files or defragmenting your drive really make a difference? Run some tests and find out. BY JOE KISSELL



t's not your imagination: your Mac's overall performance can slow down over time. Most often this happens because we gradually add more apps and background processes, have more and more documents and browser tabs open and don't restart very often. All these things take a cumulative toll on your Mac's performance. Cutting back on the number of things you have open is therefore one of the easiest strategies for putting some zip back into your Mac. Adding RAM (if your Mac supports it), switching from a hard drive to an SSD and keeping your software up-to-date are also effective quick fixes for performance problems.

But if I may rant for a moment, I want to call your attention to two oft-touted remedies for slow Mac performance that usually have so little effect as not to be worth the effort: freeing up disk space and defragmenting hard drives. That's not to say these procedures are pointless or that they never help, but as with repairing permissions, their curative properties are greatly overestimated.

Fortunately, you can prove (or disprove) the effectiveness of such remedies using science!
Benchmarking utilities can provide you with cold, hard, numerical facts – if you take the time to use them properly.

SPACE INVADERS

Lots of utilities can locate and delete duplicate or excessively large files, old caches and logs, unwanted apps (and their supporting files scattered all over the place), unused fonts and countless other types of data that

Utility options. Disk App can help vou delete unwanted files, but if your benchmarks show it doesn't make a difference in your situation, you don't need to bother.



The implication is that there's a direct correlation between performance and disk space used.

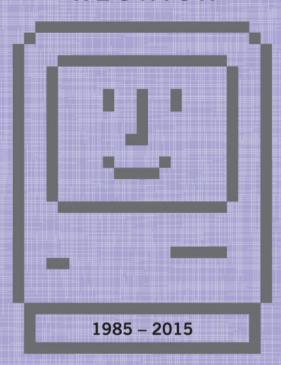
may be cluttering up your disk. I'm all for tidiness and saving disk space and I appreciate the time and effort such apps save me.

But what bugs me about much of this software is the claim, repeated endlessly in ads and marketing copy, that deleting all this digital detritus will speed up your Mac tremendously. The implication is that there's a direct correlation between performance and disk space used.

There's a kernel of truth in this claim. The true part is that OS X needs some breathing room to store things like virtual memory swap files; temporary files used when installing software; RAM images created when you put your laptop to sleep; and scratch files for audio-, video- and photo-editing

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apps. If you run out of breathing room – which happens only when your disk is quite close to being full – OS X will indeed slow down, sometimes to the point of being unusable. Free up enough space and performance should return to normal. (The need for breathing room is as true for solid-state storage as it is for hard disks, although SSDs should exhibit less pronounced speed reductions as you approach maximum capacity.)

Exactly how much free space you need to prevent performance degradation depends on quite a few variables. As a rough rule of thumb, I recommend 4 GB plus the amount of physical RAM you have installed as a reasonable minimum. But notice that this figure is independent of the size of your disk. In other words, if you have a MacBook Pro with 16GB of RAM and a 1TB disk with 990GB occupied, you're in the danger zone. But put the same files on a 2TB disk and you have loads of breathing room. In the first instance, pruning 100GB of unneeded files may have a miraculous effect on speed, while in the second, you probably won't notice any improvement at all.

There's also the matter of what you delete. If your Mac is running slowly because it has insufficient disk space for virtual memory swap files, then deleting a couple of big files may help a lot. But if it's running slowly because a particular buggy app is out of control, then only deleting (or disabling) that app will help. If you let a utility uninstall dozens of apps, disable login items and clear caches, that may help your speed problem – but not necessarily for the reason you think.

Memory check. For a reminder of how much RAM vou have, check About This Mac in the Apple menu. Since I have 8GB Lshould try to keep at least 12GB of free storage space at all times

FRAGMENTS OF TRUTH

When your Mac writes a file to a hard disk, there may not be enough contiguous space to store the whole file as a single unit. Instead, your Mac stores a piece here, a piece there and keeps a record of where all the pieces are so that they can be reassembled when you need to open the file. This all happens transparently and almost instantly. In addition, OS X automatically defragments smaller files (under 20MB) in the background.

But conventional wisdom has it that since fragmentation only increases with time, eventually disk access will slow down because the read/write head has to physically jump around so much to reach all the pieces of each file. And for that reason, several utilities can defragment your disk, rearranging all the pieces of each file

so they can be read in a single pass. Defragmentation can be extremely time-consuming, and while it's happening, your Mac will definitely be much slower than usual because of the constant heavy disk access. (As a side note, I should mention that SSDs don't require defragmentation and, in fact, attempting to defragment an SSD can reduce its lifespan.)

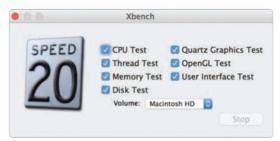
But is defragmentation worth it?
Again, it depends. All things being equal, the less free disk space you have, the greater the likelihood of fragmentation, and the greater its impact on your Mac's performance. If you have a large, fast hard drive that's nowhere close to being full, it will still have some fragmentation, but the real-world performance gains from defragmenting the drive will probably be trivial.



PUT IT TO THE TEST

If you encounter a process that purports to speed up your Mac (whether deleting files, defragmenting or something else), you could try it and then make a subjective assessment as to whether it helped. But a much better approach is to arm yourself with facts. You can use a benchmarking utility to measure it before and after making a change and compare the numbers.

The two most popular benchmarking tools for Macs are Spiny Software's Xbench (free; www.xbench.com) and Primate Labs' Geekbench (free for basic 32-bit benchmarks, \$10.49 for the standard version or \$104.99 for the Pro version; www.primatelabs.com/geekbench). They're simple to use – a single click



Check the boxes. Select the tests you want Xbench to perform and click Start. As the tests run, your individual and overall scores are shown in a separate window.

will run a predefined suite of tests and give you an overall numeric score plus individual scores for various tests.

But before you jump in, remember that we're trying to be scientific, so you must take steps to ensure that your measurements are valid. Here's what I recommend:



Click the benchmarks. Pick your processor and hit Run Benchmarks for Geekbench's series of tests. At the end, results appear in a browser window

- Eliminate any extraneous factors that may influence the results. Ideally, quit all apps, close all windows and turn off any background processes (such as backup software) that may change your Mac's resource usage during the test. (For good measure, I like to restart without reopening any apps right before running a benchmark.)
- Run the benchmarking software and record your scores.
- Change just one thing. This is the hard part! If you run the test, make lots of changes, and run it again, you won't know which change was responsible for your new score. So delete some large files, or uninstall an app, or turn off a background process or whatever but do nothing else. Then restart your Mac if whatever you changed involves software that runs automatically.
- Now rerun the benchmarking software and again record your scores. Small changes are to be expected for any of numerous random reasons and aren't significant. If you see numbers go way up or way down, whatever you changed was most likely the cause.

Of course, the fact that a benchmark number goes up significantly doesn't mean your Mac will necessarily feel faster or make you more productive. But if the numbers don't move significantly, you'll know whatever you changed doesn't affect its performance, and you can save time and effort by not worrying about that thing in the future.



YOU CAN ASK THE MACWORLD AUSTRALIA TEAM ANY MAC- OR APPLE-RELATED QUESTIONS BY EMAILING EDITOR@MACWORLD.COM.AU. ANSWERS THIS MONTH BY CHRISTOPHER BREEN.

STM READER TIP

Adjusting the exposure For all the iPhone photographers out there, iOS 8 has a new feature that may be of use. When you line up a shot in the Camera app, you can tap where you would like to set the automatic exposure and focus, and then adjust the exposure by sliding your finger up or down on the yellow sun icon to the focus box.

Donald Clifton

EACH MONTH, STM gives a prize to the Macworld Australia reader who submits the best and most useful tip

(undocumented tips preferred). This month's prize is a comfortable and portable STM quantum laptop shoulder bag worth \$119.95.

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- slip rear pocket for some reading material with quick drop phone pocket
- back pass through secures the bag to the handle of your wheeled travel piece
- padded, non-slip shoulder pad for a comfortable carry
- quick cam-adjust shoulder strap for both cross body and shoulder carries
- dedicated tablet slip pocket with soft nylex lining
- front zip org panel for business cards, pens, keys, etc.
- internal see-through zippered pocket to hold all the doo-dads that tend to get lost otherwise
- side pockets for a water bottle or umbrella
- quick grab haul loops that easily tuck away for a cleaner look

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BAD GUYS LISTENING IN? TAKE STEPS TO **AVOID PUBLIC WI-FI** SNOOPING

What is the best way to secure my MacBook Pro from hackers when I'm logged into public Wi-Fi?

H. Thomas Staton

There are a few measures you can take. Let's start with over-sharing.

By this I mean that if you don't want to provide people access to your Mac, you should shut any doors that provide it. To start, go to System Preferences > Sharing and turn off any sharing options you have enabled - file sharing and screen sharing, for example.

Although it doesn't provide a way into all of your stuff, you may also wish to turn off iTunes sharing. On more than one occasion I've logged onto a hotel network, fired up iTunes and found a load of shared iTunes libraries - some identified by the user's name. This can be particularly embarrassing when you know that person and their library is full of '70s disco albums. (That kind of insight, no one needs.) To switch off

Don't share.

If you're concerned about an intruder taking an unfair share of your data. turn off sharing.



sharing, open iTunes' preferences, click the Sharing tab and uncheck Share My Library On My Local Network.

Of course if you're really concerned, you could also turn off Wi-Fi altogether when you're not using it, which would certainly bar any attempts at your stuff when you're not watching your computer.

That's all well and good in regard to keeping out intruders, but what about the data you're sending over the network? If you're looking for that kind of protection, consider paying for a VPN (Virtual Private Network) account. Log into a VPN and your data is encrypted as it passes through a secure tunnel, thus keeping the good stuff out of the bad guy's clutches.

Or you could forego this Wi-Fi connection entirely and instead use another hotspot. Your iPhone could be just the thing if you've paid for a tethering plan. OS X Yosemite's Instant Hotspot feature makes this really easy. Your iPhone will appear under the Mac's Wi-Fi menu if the phone's running iOS 8 and you have a tethering plan. Just choose it and you're good to go.

And then there's the old-fashioned way. Purchase a MiFi device from just about any mobile carrier along with a data plan to feed it and you have a hotspot in your pocket.

THE CASE OF THE MYSTERIOUSLY SLEEPING MACBOOK

This is a weird one but I've run out of ideas. My MacBook Air works perfectly until I put it on the subwoofer that sits next to my desk. When I do that, the screen blacks out and I can't start it again. But if I lift it off the speaker and press a key, the screen lights up. This doesn't happen anywhere else I put the computer. Do you have any idea what's going on?

John Greeves

I think I do. Like all the best things in life, it's done with magnets. A little background: when you close the lid on your MacBook it goes to sleep. And the reason it does is because a magnet inside the display bezel activates the sleep on/off switch (known as the Hall Effect switch). When you open the lid, the magnet's pull is gone and the switch wakes up the computer.

Inside a typical subwoofer is a fairly large speaker, and that speaker bears a reasonably sized magnet. I will guess that when you place your MacBook on top of the speaker, its magnet exerts enough pull to trip the Hall Effect switch in your laptop. And it won't wake up while sitting on the subwoofer because the switch believes the lid is still closed. That helps explain why it wakes with no problem when you move it away from the speaker.

"Oh right..." the more cynical brand of reader hisses (which is challenging with words that have no 's'). "Magnets. Pftt..."

For those doubters reading along, may I direct your attention to Apple's own Mac notebooks: magnets in devices may cause a computer to sleep unexpectedly (support.apple. com/en-au/HT203315). Within this enlightening document we learn that even the small speakers found in the iPhone may be enough to put a laptop to sleep if you place it on the handrest. (Though, quite honestly, I've tried exactly that with my iPhone and MacBook Air and the laptop remains stubbornly awake.)



HOW TO UNINSTALL MACKEEPER FROM YOUR MAC

How do I get rid of MacKeeper?

Michael Downend

Some people have found MacKeeper useful, others not. But many people I've encountered are confused about how to delete it.

Versions of MacKeeper made in the last couple of years are actually pretty easy to uninstall, but the process isn't entirely straightforward. If you click on the MacKeeper menu in the Mac's menu bar you won't find a Quit command, which may lead you to believe that it can't be quit. Force quitting doesn't seem to work either.

What you have to do is launch the MacKeeper app in the Applications folder and then quit it. (If this is your first time running it, no, you don't have to activate MacKeeper or sign on for any of its services. Just choose Quit from the MacKeeper application menu.)

When you've done that, drag the MacKeeper app to the trash. You'll be prompted for your administrator's password. Enter it and the MacKeeper app will move to the trash and a window will pop up and offer to uninstall the rest of its components. Click the Uninstall MacKeeper button (don't bother selecting an option about why you're doing so if you don't care to). This should remove most of the files MacKeeper placed on your hard drive.

But not all of them. Although the window tells you that all



MacKeeper-related processes will be deleted, one crumb remains.

A MacKeeper Helper folder isn't removed. You can find it by visiting this location: youruserfolder/Library/Application Support. (To access this Library folder hold down the Option key and, in the Finder, choose Go > Library.) Inside this folder is a NoticeEngine.plugin file. Go ahead and toss the MacKeeper Helper folder and this file will disappear right along with it. Empty the trash, restart

HOW TO REMOVE MACKEEPER PART II (THE POP-UP EDITION)

your Mac and MacKeeper will be gone.

But how do I stop MacKeeper notifications from popping up in the Safari and Chrome browsers and asking me to install it? Michael Downend

The first thing I'd suggest you do is remove any MacKeeper-related cookies in your browser. In Safari this means opening Safari's preferences, clicking the Privacy tab and in the Cookies and Other Website Data area clicking the Details button. Search for 'mackeeper' in the sheet that appears and there's a good chance you'll find a cookie for mackeeper.com. Select it and click the Remove button. Vow to never visit the site again.

In Chrome, open its preferences and in the Settings window click the Show advanced settings link. In the Privacy area click the Content Settings button and in the window that appears click the All Cookies and

AdwareMedic

Inter-Street

AdvanceMedic

Inter-Street

Associated and Version 2.2

Inter-Street

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State for Melant

Associated resources if your problem has not been solved abort
spaced or resources and resources and been solved abort
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For Melant

Opens the AdvanceMedic documentation.

Site Data button. Use the search field in the resulting window to look for 'mackeeper'. Click Remove All.

My hope is that clearing these cookies will take care of the problem. If it doesn't, it's time to employ stronger measures. The first would be to download and run The Safe Mac's AdwareMedic (adwaremedic.com – donation requested). It will scan your Mac, seeking out adware that may be causing your problem.

Still no good? On to an ad blocker.

There are a load of these things out there and some are more refined than others. One variety will provide you with no controls whatsoever and block just about anything that smells like an ad – banners, pop-ups, videos and so on. The problem with some of these is that they can take out good content as well as bad. Also, when employing such broad strokes, they block the less intrusive ads that help websites stay in business.

I would suggest, instead, that you use an ad blocker that goes after the really intrusive stuff – the pop-up ads and autoplay videos – and leaves 'reasonable' ads in place. This way you help support sites you enjoy while, at the same time, filtering out the elements that may prevent you from ever visiting the site again. Adblock Plus (adblockplus.org) has made efforts on this front and leaves 'acceptable' ads in place by default.

In the course of my research I've seen recent posts from someone claiming to work with MacKeeper. This person says that the pop-up ads are from an old advertising campaign and will not be continued. If all of this is true, the problem may take care of itself.



Knock it on the head. Removing the MacKeeper cookie may stop the annoying pop-ups.

Health check. AdwareMedic can root out adware

issues on

your Mac.

Hit the switch. You

can choose whether

or not you

want your

device to

make and

iPhone calls.

receive

1 HOW TO PREVENT THE IPHONE FROM FORWARDING CALLS

I'm running iOS 8 on my iPhone along with a couple of iPads and an iPod touch. I also have Yosemite on my Mac. At first I was impressed by the feature that lets my iPhone ring through to my other devices, but now when I receive a call, the whole house fills with ringtones and my work is interrupted when it happens. Is there anything I can do to shut up some of these devices? Graham Lee

Certainly. If you want to stop forwarding entirely, you can do so by tapping Settings on your iPhone, tapping FaceTime, and then flicking the iPhone Mobile Calls switch to off. You can always enable it again later if you want the feature back.

But you can disable it for individual devices as well. To prevent a call being passed off to an iOS device, pick up that device, tap *Settings > FaceTime* and disable the switch next to the iPhone Mobile Calls entry. This will stop that device from receiving calls passed to it by your iPhone. (It will also prevent you from making phone calls from your device via your iPhone.)

On your Mac, launch FaceTime, open its preferences, and in the Settings tab disable the iPhone Cellular Calls option. As with an iOS device, this prevents your Mac from making and receiving calls.

While we're on the subject of things being passed around, let's talk about Text Message Forwarding. This is the



feature implemented under iOS 8.1 that lets SMS messages received by your iPhone (on the same Wi-Fi network as your other devices) pass those messages to another device.

This feature is more configurable than iPhone call forwarding. To configure it tap Settings on your iPhone and then tap Messages. Tap the Text Message Forwarding entry and you'll see a list of devices linked to your Apple ID that you can forward messages to. Just enable the switch next to each device that you'd like to be part of the texting party.

s the be part of the texting party.





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Music streaming services

ANTHONY CARUANA has put four of the best music streaming services on the market to the test. Which one is right for you?

Spotify

Spotify is multiplatform. There are iOS apps as well an OS X version for when you're at your desk. You can create a user account with Spotify or use your Facebook login, so there's no need to remember another username and password.

If you choose the Facebook login option, it's worth noting that Spotify will ask to post on your timeline.

Music streaming services are judged by the variety of music they deliver. On that score Spotify delivers. We listened to a wide variety of different music from artists we know, as well as being exposed to musicians we hadn't heard of before.

The genre listing in Spotify is interesting. As well as the usual choices based on musical styles such as classical, rock and R&B, there are also activity-related genres. For example, if you like to listen to some peaceful tunes before sleeping, there's a 'Sleep' genre that is further divided into sub-genres such as rainforest sounds, acoustic and lullabies for the kids.

One thing we did notice was that even though songs with explicit lyrics were clearly labelled, there was no way to have these excluded from what was available.

Spotify is free but ad-supported. That means you'll hear the occasional ad while listening. You can pay for a subscription that removes commercial interruptions and gives you the ability to download tracks and playlists for offline use.

Bottom line. Spotify is to streaming music what Xerox was to photocopiers and Hoover was to vacuum cleaners. Spotify's service, delivering music wherever and whenever you want.





SPOTIFY
FREE (ad-supported); \$11.99 per month

PROS Variety; multiplatform; easy to use

CONS Cannot hide explicit songs

iTunes Radio

Apple's approach is different to that of the main players in streaming music. Rather than provide an easy-to-browse listing of different genres, artists and other ways of categorising music, iTunes Radio works with 'Stations'. These can be based on specific artists, genres or keywords. For example, searching for AC/DC delivered us 'Back in Black Radio'.

If you just want to start listening, Apple provides a number of featured stations covering songs that are charting now, as well as the current iTunes Top 50, lists of new artists and other interesting compilations.

Although this approach is very Apple-like, it lacks something we really like about the streaming services we looked at – being exposed to artists and music we wouldn't have otherwise known about.

However, while listening to a song, there is a star button that lets you tag a song. The button lets you choose to play more songs like the one you're listening to, never play the song again or put it on your iTunes Wish List.

Unlike other services that only rely on advertising or subscriptions to raise revenue, Apple also sees the songs as ads themselves. While you're listening, the price of the song is displayed, so you're just a tap or two away from buying the song and adding it permanently to your library.

Bottom line. iTunes Radio is accessible free of charge directly from the Music app on your iOS devices or from iTunes on your computer, but it lacks the ability to listen to whole albums.





ITUNES

FREE (ad-supported); \$34.99 per year

PROS Already integrated in iTunes and the Music app

CONS Can't listen to whole albums

Pandora

Like Apple's iTunes Radio, Pandora works by allowing you to search for music based on artists, genres or composers. It then creates a custom radio station based on that search, which you refine by giving the songs that play either a thumbs up or a thumbs down.

Unlike Spotify, which allows you to listen to complete albums, Pandora is all about creating a digital radio station customised to your specific tastes.

As with all legal streaming audio services, you'll only be able to access music that has been licensed to Pandora. That said, Pandora delivered music from every artist we searched for and then created a station based on that artist's style.

Pandora doesn't clutter its browser or iOS app screens with lots of recommendations. However, once you've searched for a few different artists and given the app some guidance on which songs you've liked, it will suggest different stations based on your listening history.

Listening to music is very much a social activity these days, so it's no surprise that Pandora lets you share what you're listening to with friends on Facebook. You can use your Facebook credentials to log in or create a separate login. The iOS app also allows you to use Pandora as an alarm clock, so it can play your preferred morning music when you're meant to wake up.

Pandora is advertising supported unless you pay for a subscription. The ads play every few songs and are also displayed on-screen in the iOS app. If you're listening through the web browser, you can buy complete CDs from Amazon using provided links. We found that there were no ads when we connected Pandora to our Sonos set-up.

Bottom line. Pandora provided all the music we searched for and can be used as an alarm clock, but the ads in the free version can be annoying.





PANDORA FREE (ad-supported); US\$4.99 per month

PROS Lots of music

CONS Ads can be annoying

Rdio

Rdio pulls together many of the features we most like about streaming music. It has a broad range of music available, catering to most musical tastes. The browser and app interfaces are uncluttered and easy to use, and we weren't bombarded with lots of ads that interrupted the music. If you have a Sonos streaming system in your home, you can use Rdio with it, although you need to upgrade to an Rdio Unlimited account.

The iOS app works well and integrates with the browserbased system. If you're playing a song while working at your computer and want to continue listening on your iPhone or iPad when you leave the office, you can continue playing your album or playlist with a tap of the screen. When we started a song on the app, it was also controllable from the browser.

One thing we found frustrating was Rdio's search function. If we entered a word like 'classical', it returned a list of songs, albums and artists with the word classical in their name.

We did like the slider when we listened to a station based on a genre. While listening to the Punk station, we could choose whether to focus on popular songs or be more adventurous. Shifting the slider on the iOS app, while we were listening on our Mac automatically updated the station's playlist.

Like most other streaming music services, Rdio integrates with Facebook. You can use your Facebook account to log in to Rdio. But you can choose to not have Rdio update your Facebook status, so your friends don't tease you over your musical tastes.

The free version of Rdio is ad-supported with Rdio Unlimited being ad-free.

Bottom line. Rdio is easy to use and you can pick up where you left off when switching devices, but the search can be frustrating.





RDIO FREE (ad-supported); \$11.99 per month

PROS App and browser sync; easy to use

CONS Frustrating search



Brydge BrydgeAir

This keyboard case makes your iPad feel like a laptop.

he BrydgeAir keyboard is unlike any iPad accessory I've used before. With integrated speakers underneath a backlit keyboard with a 180-degree hinge, it makes your iPad feel like a laptop, and that's the entire point.

In a market of nearly identical iPad keyboards that offer the same core features, Brydge is trying to set itself apart. After spending a week with its solution for the iPad Air 2, I'd say it does just that.

FAMILIAR, YET DIFFERENT

As with nearly all iPad keyboards, the Brydge is equipped with the standard Mac keyboard layout. The keys are a bit smaller than those found on the Logitech Ultrathin Keyboard Cover, and appear to have the same amount of travel, yet offer less resistance. In my use, less resistance translated into an adjustment period of accidentally entering letters when I merely intended to rest my fingers on keys. After using the keyboard for a few hours, I was acclimatised and typing relatively error free.

Along the top of the keyboard is a row of shortcut keys offering a Home button, lock key, media, brightness and volume controls. In the lower-left corner is a shortcut key to activate Siri.

One of the shortcut keys activates the keyboard's backlit keys, which is a feature I appreciate immensely. Backlit keys make it possible to use the keyboard in the dark without having

to squint or move the iPad's lit screen closer to the keyboard to find a shortcut key. I do wish there was an option to adjust the brightness of the backlit keys, instead of only an off or on option.

THOSE HINGES

Equipped with two hinges, each lined with a silicone shim, the BrydgeAir holds your iPad into place impressively well. It takes a significant amount of force to remove your iPad from the hinges. Additionally, when touching the screen there's hardly any play, resulting in little to no bouncing of the screen compared to other keyboards.

The hinges provide for multiple viewing angles, making it one of the only iPad keyboards I've used that has made it possible to comfortably work at a standing desk, a table or sitting on a couch with the keyboard in my lap.

SPEAKERS... IN A KEYBOARD?

When using the BrydgeAir I was surprised at how much the setup resembled the look of a smaller MacBook Air – and sounded like one too, thanks to two small Bluetooth speakers located next to the hinges on the keyboard.

After the initial pairing process, you need to hold down the speaker button (located next to the power switch on the front edge of the keyboard) for a few seconds to connect to your tablet. The ability to connect to either the keyboard or speakers – independent

of one another – is a convenient way to save battery life on both devices.

Speaking of battery life, my iPad's battery life took a hit when using just the keyboard (beyond the normal decrease in battery when connected to an external keyboard). Usually I get roughly two days of use between charges, but during my testing of the BrydgeAir, I was charging my iPad Air 2 every night.

The speakers aren't the best I've ever heard, but they do offer a marked improvement over the iPad's speakers.

Bottom line. The BrydgeAir brings more functionality to the iPad than other keyboards in this category. The speakers sound OK, but not great. The backlit keys are an appreciated feature, as is the sturdy hinge and multiple viewing angles. Battery life takes a bit of a hit when you're using both the keyboard and speakers at the same time, but that's to be expected.

- JASON CIPRIANI



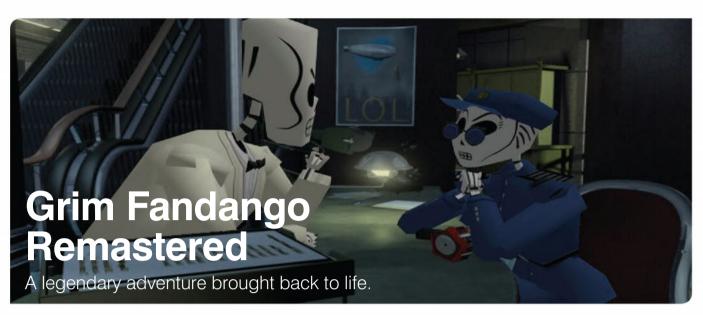
BRYDGE

www.brydgekeyboards.com

PROS Multiple viewing angles; sturdy aluminium construction; adds more weight over a plastic keyboard case

CONS Speakers are just OK; iPad battery life suffered

U\$\$189 (GOLD); U\$\$169 (SILVER, SPACE GRAY) + Shipping



rim Fandango is a classic adventure game released in the long-distant past of 1998. You play the part of Manuel 'Manny' Calavera, who looks a lot like the Grim Reaper until he takes off his cloak and his stilts and folds up his scythe and reveals he's... a travel agent. No, seriously. When you die, you end up in the Land of the Dead where you must embark on a four-year journey to the Ninth Underworld.

If you were a good person, however, you can skip that whole 'four-year journey' thing and travel in style – by car, boat or the fabled 'Number Nine' train, which can get you to the Ninth Underworld in mere minutes. Manny's job is to sell these travel packages.

There's a huge conspiracy afoot in the Land of the Dead though, and it's up to Manny to solve it. Someone is stealing Number Nine tickets from good people and leaving them to the four-year walk.

It's a seedy noir film mixed in with Aztec/Mexican views of the afterlife. Frankly, it's unique and one of the cleverest settings ever to make it into a video game.

It's a '90s adventure game, meaning it is full of asinine puzzles where the solutions barely make sense. If you haven't played before, you're going to get stuck. Seriously, and I can't say this enough, some of the puzzles are absurd.

GRAPHICS

This is *Grim Fandango Remastered*, meaning it's basically a prettied-up version of *Grim Fandango*. Don't go into this expecting as extensive a remake. Instead we get *Grim Fandango*, but smoothed out a bit for modern high-resolution monitors – smoother edges on 3D objects, for instance. At times it's stunningly gorgeous – there's almost a claymation feel to certain scenes.

Other times, a bad model or awkward shading reminds you that yeah, this is a game from 1998. Your pal Glottis is the worst of the lot, with some weird bulgy arm muscles that tend to clip through each other. The 2D backgrounds also could use work. Most, if not all, have clearly just been resized to fit the higher resolutions, resulting in grainy and blurry backdrops that look entirely out of place compared to the smooth character models.

CONTROLS

The graphics overhaul on *Grim Fandango* is spiffy, but honestly people who played the original will probably be most excited about the new controls. The whole game is controllable with the mouse and keyboard, without mods. Or you can play with just the keyboard. Or you can bust out the gamepad and play with either tank or camerarelative controls. There are so many options! But unfortunately, none of them are perfect.

Bottom line. *Grim Fandango Remastered* isn't perfect. We've had prettier.

On the other hand, it's *Grim Fandango*. It's a game that's been all-but-unobtainable for over a decade now, cleaned up to run on modern systems with no hassle, and it looks astonishingly good for its age.

Is it a '90s adventure game full of adventure game logic? Absolutely. Are the graphics and controls perfect? No. Could it use a bit more polish? Probably.

But this is still one of the best video games I've ever played. The writing is hilarious, the characters and setting are creative as hell, and along with *The Longest Journey* I'd say *Grim Fandango* exemplifies classic adventure games. It's ambitious and mature in a way that not a lot of games before or since have accomplished.

- HAYDEN DINGMAN



DOUBLE FINE PRODUCTIONS

www.doublefine.com

PROS One of the most creative, best-written video games of all time; new control schemes are spiffy

CONS Some of the puzzles are asinine; occasional graphical glitches or ugly textures

US\$15 (VIA STEAM)

PLX Devices Legion Meter

Check up on your USB chargers.

harging is an integral part of life. No matter where I go I'm forever scouting outlets and lugging around expansion packs to make sure I have enough juice to get through the day. My battery percentage is constantly on my mind and at any given moment I'm acutely aware of how much is left and how long it'll take to get back to a safe level. But for all my voltage vigilance, I don't know a whole lot about what makes one power adapter better than another.

PLX Devices knows charging. Its original Legion external battery redefined charging with its built-in OLED display that provides live feedback for a variety of useful stats. It quickly became my favourite way to charge, even when there was an outlet within reach.

With Legion Meter, PLX is bringing that kind of battery know-how to the rest of our chargers. Small, light and

Legion

smart, the Legion Meter works with any USB charger in your arsenal, delivering accurate readings of both the port's output and your battery's milliwatt hours, and helping you pinpoint the fastest, safest ways to charge your devices.

MEASURING THE JUICE

The miniature device doesn't feel cheap, exactly, but the plastic assembly isn't exactly up to the rugged standards set by Legion. A small button at the top acts as the wake and advance control, and you can long-press it to switch the orientation.

After you insert the Legion Meter into your charger's USB port, you'll plug your cable into the USB port on the back of the meter. The Legion Meter instantly begins collecting data from each end, providing something of a diagnostic check of both the charger and the device being charged. It won't actually alert you to anything that may be wrong, but a wealth of information is available on its tiny screen, including a reading of the USB port's voltage, current and power, as well as a running tally of the milliwatt-hour capacity of the device's battery.

But while Legion Meter is quite useful for testing the strength of your various chargers (as you might have guessed, Apple's are among the best), the device's premier feature is its promise to speed up your charging by as much as 92 percent. A recessed switch on the side toggles between accelerated charging (A) and data passthrough (D) modes.

I didn't see much of an improvement in the time it took to juice up my devices over a USB port with no data capabilities, but plugging into my Mac was a different story. When in data passthrough mode, your device will connect as normal, with your iPhone sipping whatever available power it can get, but all that changes when you flip the switch – all syncing with iTunes is severed, so every drop of USB voltage can be used solely for charging.

Bottom line. While not quite up to the 92 percent claim, I consistently received faster charging through my Mac's USB port, in some cases reaching about 50 percent higher speeds with my iPhone 5 (and about 25 percent with an iPhone 6). It's not that PLX is overstating Legion Meter's abilities, but in my testing, charging times varied widely depending on a variety of factors. But even with nominal increases in charging speed, Legion Meter will make a great addition to your charging arsenal.

- MICHAEL SIMON



PLX DEVICES

www.plxdevices.com

PROS Small, capable multimeter with intelligent live readings; boosts charges coming from your Mac's USB port

CONS Most users probably won't get the maximum increase in charging; plastic housing feels cheap

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Philips 34in Brilliance UltraWide LCD Display with MultiView and 4K Ultra HD monitor

Two monitors bursting with pixels and screen inches.

ulti-tasking can be an issue on a single display. A standard 24in monitor can be a great companion when you're working on a single window or even running two side by side, but if you're having trouble displaying all the windows necessary for your work or play, the hassle of opening and minimising windows can grow to be guite the grind. Rearranging multiple browser windows, your favourite text editor, photo-editing software and finder windows into the perfect layout welcomes frustration. Here's a look at two possible solutions.

PHILIPS BRILLIANCE ULTRAWIDE LCD DISPLAY WITH MULTIVIEW (BDM3470UP)

The Philips Brilliance UltraWide LCD Display with MultiView (BDM3470UP) certainly provides the extra width, in a thin-bezel, pixel-packed package. Featuring a 3440 x 1440-pixel AH-IPS display running at 60Hz, the monitor can easily handle multiple windows open side by side, reducing the painstaking task of prioritising which windows should be open and which can afford to be minimised.

Rather than expanding a display vertically and horizontally, Philips has stretched the display on each side, changing from a common widescreen aspect ratio of 16:9 to a whopping 21:9. Without the stand it stretches 82.8 x 37.8 x 5.8cm.

With RS232, DVI, MHL-HDMI, DisplayPort and D-SUB input ports, the Philips monitor offers a range of connectivity options. Two USB 2.0 and two USB 3.0 ports, one of which is a fast charging port to quickly recharge a smartphone or accessory, sit around the back of the display.

The BDM3470UP supports a nice range of ergonomic adjustments, making it easy to spin the display on its base to access the range of ports. The flexible stand lets the display move vertically in a surprisingly smooth manner and holds itself in place wherever you decide to stop on the 18cm range.

Moving the display horizontally is just as easy: the screen is able to move 170 degrees left or right. The monitor tilts five degrees forward and 20 degrees backwards, which we found very helpful, and can also switch 90 degrees from horizontal to vertical if you need to view long lists.

While the BDM3470UP provides extra screen real estate from a single source, it can also run the contents of two sources in two halves of the screen via Picture by picture (PbP) or one



source in the top-right of the screen via Picture in picture (PiP). Maybe you have two computers that you need to use simultaneously? Or, like us, you think it would be great to watch a Blu-ray movie while you work.

We were able to choose which side of the display we wanted each screen and, aided by the size of the BDM3470UP, the drop in size didn't hamper our ability to read text, surf the internet or work productively (despite the regular head movement towards the Blu-ray movie distraction).

Throughout our test period the display was exceptional. The picture was beautifully crisp. Blacks were dark, colours were accurate and we didn't spot any backlight bleeding.

The IPS panel offers a wide 178-degree viewing range from top to bottom and side to side, making the display accessible in a number of viewpoints. However, the flexibility of the stand makes it easy to align the display with your seated position.

The menu is easy to work your way through with one exception. When connected to our Mac, the volume controls are handed over to the display – those on our keyboard no longer worked – and, without external volume buttons, it can be a pain to head through the menu to adjust the volume.





PHILIPS 4K ULTRA HD MONITOR (BDM4065UC)

The Philips 4K Ultra HD monitor (BDM4065UC) takes a different approach to screen real estate with a 40in display at an aspect ration of 16:9. This is a display for professionals.

With a 3840 x 2160-pixel resolution, the monitor can run as a single 4k display, two displays side-by-side, three displays with two on one half of the screen and four HD displays, taking up a quarter of the screen each, from four different inputs.

The BDM4065UC provides a flicker-free, true-colour experience that will impress. It is quite incredible to see four Full HD screens in full flight on the one display. For those who work with multiple computers and/or sources simultaneously, this is a monitor that should be on the list to test, especially at just under \$1100.

When divided into multiple displays, users can select which window is located in which corner and the audio output. Like the BDM3470UP, the Ultra HD monitor can run two inputs as PiP. However, Philips has taken the useability up a notch with the BDM4065UC, adding the ability to choose the corner you would like the smaller display to sit and also to adjust the size of the window.

Plus, with an adjustment to the button

layout from the BDM3470UP, the 40in monitor allows users to quickly switch between input and audio sources, rather than scroll through the menu options.

Unlike the BDM3470UP, the BDM4065UC has no ergonomic adjustments. Once it has been set up, it will not rotate side-to-side, tilt forward or back or move vertically. The wide 178-degree viewing range does mean the whole screen is viewable from a number of seated positions, but the stationary stand is slightly limiting.

With RS232, VGA, MHL-HDMI, HDMI, DisplayPort and mini DisplayPort input ports, the BDM4065UC also offers a range of connectivity options. The larger display features four USB 3.0 ports, one of which is a fast charging port, located on the back and like, the BDM3470UP, has 3.5mm audio in and audio port ports.

Philips' SmartImage provides six display presets for different usage modes, such as office, movie, photo and gaming, which are accessible via the new button layout. It is quick and easy to adjust the display when you switch between work and play.

Bottom line Both Philips monitors offer serious screen real estate and picture quality. The 34in BDM3470UP

is a display for the multi-window type and would suit the desk of many office-bound workers. The ergonomic adjustments are a big plus, as is the number of input options.

The 40in BDM4065UC is a monitor for professionals working in photography and video. The ability to display content from four sources and the huge number of pixels it offers isn't a requirement for most, but would be very handy for video editing.

- JONATHAN STEWART



PHILIPS BDM3470UP

www.philipsmonitors.com.au

PROS Ergonomic adjustments; quality picture; wide view

CONS Volume controls

\$1099



PHILIPS BDM4065UC

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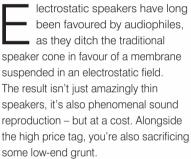
PROS Quality picture; input sources; PiP and PbP; looks great

CONS Fixed stand; volume controls

\$1099

BenQ treVolo electrostatic speakers

If you'd rather sit back with Miles Davis than Miley Cyrus, then BenQ's treVolo portable electrostatic speakers could be for you.



BenQ's treVolo brings vocals, strings and brass to life, but efforts to reproduce thumping bass lack conviction. Electrostatic speakers are designed to do jazz quartets, symphony orchestras and acoustic performances justice, rather than hard rock or grunty rhythm and blues. It's not a judgement on your taste in music; it's simply a matter of playing to the strengths of the technology.

The treVolo's big selling point is that it's portable, something that's quite rare for sensitive electrostatic speakers. The compact design slips nicely into a suitcase or travel bag, with the classy anodised metal finish that you'd expect at this kind of price. When you arrive at your destination and it's time to unwind, the speaker panels fold out like wings, with dual woofers in the main body. The panels project both forwards and backwards to offer a wide and spacious sound stage. The unit can run off AC power or a built-in battery that is good for around 12 hours.

Connect the treVolo to your Mac via a micro-USB cable and it's automatically recognised as an external USB speaker, so you can play music from iTunes or other software. There's also a 3.5mm audio input on the back for plugging in portable music players.

Alternatively, you can stream music wirelessly via Bluetooth 4.1 – with support for high-quality aptX streaming if your gadgets are compatible. You can even answer calls when it's connected to your phone via Bluetooth, as the treVolo features a built-in noise-cancelling microphone.

To make the most of these electrostatic speakers, you need to start with great source material. If you have an ear for detail, you can certainly hear the difference when comparing Miles Davis' jazz album classic *Kind of Blue* ripped in both standard 256 kbps (kilo bits per second) AAC audio and the high-fidelity Apple Lossless format. Flicking between them – like an eye test at the optometrist – the nuances of the instruments shine though, such as the richness of the double bass.

Thanks to the excellent audio reproduction of electrostatic speakers, it's easier to close your eyes, get lost in the music and imagine you're really in the same room as the musicians. Listening though cheaper speakers, these subtle improvements can be lost.



Switch across to The Rolling Stones and everything sounds a bit flat and brash through the treVolo once the heavy guitars and drums kick in. So this isn't the kind of portable speaker you'd buy to rock an outdoor barbecue or support a poolside dance party. If that's your goal, then something like a portable Logitech UE Boom may be a better investment.

Bottom line. BenQ's treVolo electrostatic speakers aren't for everyone. The speakers are targeted at people with an ear for detail and are more interested in sweet strings than thumping bass. If you rip your music library in lossless formats, because you can better hear the nuances of the instruments during live performances, then you're the target audience for these speakers. If this doesn't sound like you, there's no shame in admitting it – if you're addicted to bass, you'll be happier spending your money elsewhere.

- ADAM TURNER



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CONS Underwhelming bass

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